

DAILY METAL REPORTER

MONTHLY SUPPLEMENT

# METALS

Published Since 1929

## *In This Issue*

### **PROPOSE COPPER IMPORT TAX OF 4c POUND, PERIL POINT OF 32c**

By J. B. PULLEN, Assistant General Manager  
Phelps Dodge Corporation

### **LEAD PRICE MAY HOLD UNTIL DECEMBER AND THEN RISE**

By K. W. GREEN, Director of Purchases  
The Electric Storage Battery Co.

### **BRITISH METAL MARKETS**

By L. H. TARRING  
London, England

### **DOMESTIC METAL MARKET REVIEW**

### **U. S. METAL IMPORT DUTIES**

### **WASHINGTON REPORT**

### **METAL STATISTICS**

**SEPTEMBER**

**1957**

# Kennecott Copper Corporation Kennecott Sales Corporation

*Producers and Sellers of*  
**Electrolytic Copper**  
**Chino Fire Refined Copper (K.C.M.)**  
**Braden Fire Refined Copper (★★★)**  
**Molybdenite**

*Offices*

**161 East 42nd St., New York 17, N. Y.**

## PHELPS DODGE CORPORATION

PHELPS DODGE REFINING CORPORATION

300 PARK AVENUE, NEW YORK 22, N. Y.

### **C O P P E R**

P★D — ELECTROLYTIC — LNS

PDM FIRE REFINED

COPPER SULPHATE — NICKEL SULPHATE  
SELENIUM — TELLURIUM — PRECIOUS METALS

*Buyers of*

**BULLION, ORES, CONCENTRATES, MATTE and BLISTER**

Subscription  
\$5.00 a Year  
50c a Copy

DAILY METAL REPORTER  
MONTHLY SUPPLEMENT  
**METALS**

Registered U. S. Patent Office  
Published Monthly Since 1929

Charles H. Lipsett  
Publisher

Dr. J. Zimmerman  
Editor

Wm. E. Hoffman  
Associate Editor

Monthly Supplement of  
Daily Metal Reporter  
September 25, 1957

**SEPTEMBER, 1957**

**Vol. 28 — No. 3**

**TABLE OF CONTENTS**

Washington Report .....	5
Propose 4c Copper Import Tax, 32c Peril Point .....	7
By J. B. PULLEN, Assistant General Manager Phelps Dodge Corporation	
Lead Price May Hold Until December, Then Rise .....	9
By K. W. GREEN, Director of Purchases The Electric Storage Battery Co.	
British Metal Markets .....	11
By L. H. TARRING London, England	
U. S. Metal Import Duties .....	14
Domestic Metal Market Review .....	15
Metal Statistics .....	20

METALS — 425 West 25th Street, New York 1, N. Y.

Published by the National Business Press, Inc.  
Phone: WATkins 4-0660

Cable Address: ATPUBCO, New York

Branches: Washington, Philadelphia, Chicago, Boston

London Office: 81 Highview Ave., Edgware, Middlesex, England

Cable Address: ATPUBCO, London

Affiliated Publications: Daily Metal Reporter, Daily Mill Stock Reporter,  
Waste Trade Journal, Waste Trade Directory, Standard Metal Directory,  
Mines Register, World's Waste Trade Directory, Sales (weekly), Daily Surplus  
Sales Record

## Two LINE Editorials

Senator Goldwater's idea seems to be that "Modern Republicanism" is just another name for extravagant Republicanism.

\* \* \*

An editor says: "It's hard to tell which side Tito is on." A good guess would be that he's on Tito's side.

\* \* \*

Cutting down on the mail deliveries might not be such a bad idea if the postman could be persuaded not to deliver all those letters you don't want to get.

\* \* \*

A Harvard professor has stated that Texas is suffering from "a subculture continuum," and it is predicted that Texans won't like this if they ever find out what it means.

\* \* \*

An astronomer tells us that a comet strikes the earth only once in 80,000,000 years; but he fails to tell us whether one has struck within the last 79,000,000 years, so we don't know when it's time to start worrying about it.

\* \* \*

Every Cabinet member agrees that the budget should be drastically cut—but, of course, without reducing the appropriations for his own department.

# Metal Traders, Inc.

67 Wall St., New York

Telephone:

BOWLING Green 9-6820



BUYERS and SELLERS of  
ALL METALS and ALLOYS  
METALLIC ORES  
SCRAP METALS  
RESIDUES

# AMERICAN SMELTING & REFINING CO.



COPPER  
LEAD  
ZINC

and By-Products



120 Broadway

New York



THE  
AMERICAN  
METAL  
COMPANY, LTD.

61 Broadway, New York 6, N. Y.

selling

COPPER  
ZINC  
LEAD  
TIN

Silver • Bismuth • Cadmium  
OFHC® Copper  
OFHC Copper Anodes  
Solder • Metal Powders  
Zinc-Base Alloys  
Selenium • Tellurium  
Germanium

buying

ORES  
SCRAP  
RESIDUES

custom smelting and refining

Gold, Silver, Copper  
Zinc and Lead Ores, Sweeps,  
Mattes and Bullion  
Copper and Brass Scrap  
Copper-Bearing Material  
Zinc Drosses and Skimmings  
Lead Scrap and Residues  
Lead-Covered Cable  
Tin-Bearing Material  
Automobile Radiators



# Washington Report



September 17, 1957

**D**OMESTIC copper producers are expected to get in line behind lead and zinc mining firms in a plea for higher tariffs. At this writing, an Emergency Lead and Zinc Committee headed by Charles E. Schwab, expects to file a petition with the Tariff Commission by October 1. Unless copper falls below 24 cents a pound, this segment of the metal industry will have to wait for Congress to convene in January before it can appeal for increased tariff protection.

Both House and Senate committees had debated for some time about providing a measure of relief for the domestic lead and zinc industries by the imposition of a sliding scale tax on imports of such metals. The Senate Finance Committee had even approved raising the import tariff for each metal to a flat 3.00c a pound. But the problem of helping the domestic mining industry was tossed back into the lap of the Tariff Commission by President Eisenhower. The President at a press conference on August 21 said he believed that in the long run the best way to handle industry problems resulting from import troubles is through the Tariff Commission.

## "Escape Clause"

The President is believed to have taken his cue from a suggestion that was made the day before by Senator Arthur V. Watkins (R., Utah) that the lead-zinc industry begin immediately proceedings before the commission for relief under the "escape clause" of the Trade Agreements Act. Even if the Emergency Lead and Zinc Committee files its petition by October 1, no decision by the Tariff Commission is expected before December. Any commission recommendations would then go to the White House for action where favorable consideration is anticipated.

In the opinion of legislators, who have been advocating a sliding scale tax on foreign imports, the domestic mining industry is likely to get tariff relief before 1957 is over. It is also their view that the industry will probably get the maximum relief that is permitted under Section 7-A of the Trade Agreements Act which empowers the Tariff Commission to recommend a 50 per cent increase in the import duties that prevailed on January 1, 1945.

## 50% Tariff Hike Possible

The zinc import duty at that time was 1.40c a pound on slab zinc and 1.70c a pound on pig lead. The import duty on zinc ore and concentrates and on lead ore and concentrates was 1.20c (content). If the Tariff Commission makes the same recommendation to the President that it did in 1954,

namely a 50 per cent hike in the import duties, the new duty on slab zinc would be 2.10c a pound and on pig lead 2.55c a pound. The import duty on the concentrates could be 1.80c on each.

The current duty on pig lead is 1.0625c a pound and that on slab zinc 0.70c a pound.

Informed quarters here pointed out that not only the President but every Government agency, including the State Department, favors greater protection for the domestic lead and zinc industry in the form of higher import duty. Hence the Tariff Commission's recommendations are not likely to be turned down as they were in 1954.

## To Seek Import Quotas

Chairman Schwab of the Emergency Lead and Zinc Committee said his group would also seek import quotas and any other relief possible under the law. Concerning import quotas, Mr. Schwab said this would be a new development for the industry. The principal countries affected would be Peru, Australia, Mexico and Canada.

## Plan 30c Copper "Floor"

Senator James E. Murray (D., Mont.) announced early this month he is drafting a bill intended to place a "floor" of 30.00c a pound under copper prices. The measure will be presented to Congress when it reconvenes in January. Under current law, should the average copper price for any calendar month go below 24.00c a pound a 2.00c a pound duty would prevail.

Industry's thoughts on the subject were voiced by J. B. Pullen, assistant general manager of Phelps Dodge Corp., at the American Mining Congress in Salt Lake City, Utah, on September 10. Mr. Pullen recommended a boost in the excise tax plus an increase in the peril-point price below which

the excise tax would become effective. He suggested a 32.00c peril point and a 4.00c a pound excise tax on imported copper.

The present situation is alarming and the future outlook for the domestic copper industry depends on the satisfactory solution of the present and near-term problems confronting the producers, Mr. Pullen said. (Mr. Pullen's address before the American Mining Congress appears in this issue on Page 7.)

## Mineral Problems Discussed

The Administration's views on copper, chrome and tungsten industry problems were made known by John G. Liebert, special assistant to the Interior Department's Assistant Secretary for Mineral Resources, before the minerals subcommittee of the Senate Interior Committee on August 28.

Asked what could be done to aid the copper industry, Mr. Liebert replied that Congress could reimpose the tariff of 1.80c a pound which had been suspended. He said it was the responsibility of the copper industry to go to the Tariff Commission for a hearing if it desired relief from that source.

Told by members of the chrome industry that the \$21 a ton bonus figure for chrome was unrealistic, Mr. Liebert said that if, after a thorough study, the projected level was found to be inadequate, it could be revised upward. He said the Government's program was based on 50,000 tons a year although only about 30,000 to 35,000 tons were currently being produced annually by 50 producers.

Commenting on the refusal of Congress to appropriate funds for tungsten purchases under Public Law 733, Mr. Liebert emphasized that the Administration, Congress and the country have a commitment to the tungsten miners that should be kept. He termed the current \$13 a ton price for tungsten very low and blamed overproduction brought about by buying for the stockpile as well as filling domestic needs. He said the Government has \$50,000,000 in long-range contracts for stockpiling delivery extending to 1959 at prices averaging in excess of \$50 a ton.

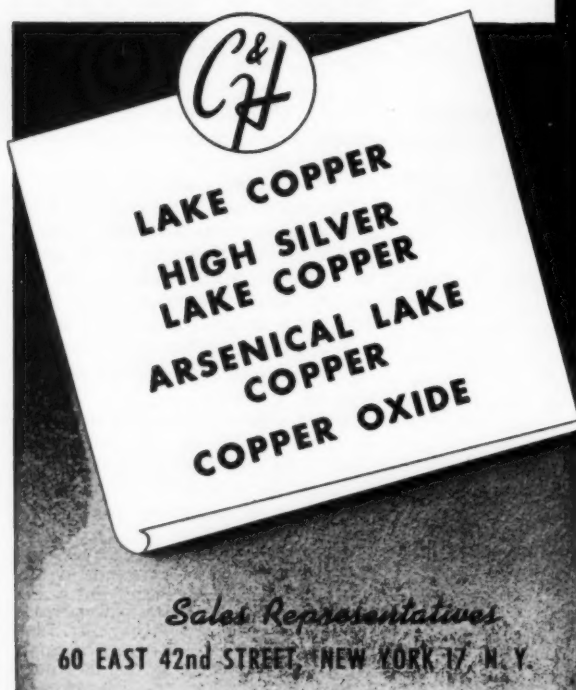
## Tungsten Output Costs

The Senate, on the same day, passed a resolution ordering the Tariff Commission to investigate differences between domestic and foreign costs of producing tungsten ore and concentrates. The measure, which does not require House action, directs the commission to report its findings not later than next March 1.

In another move, Senator Gordon Allott (R., Colo.) introduced a bill to revive the expiring program of buying tungsten for the defense stockpile. The bill would authorize purchase at \$55 a ton of up to 250,000 ton units that already had been produced with the understanding the purchase program would be continued. It also would authorize a long-range incentive program to assist small producers, in-

(Continued on Page 13)

## CALUMET & HECLA, INC.



**LAKE COPPER**  
**HIGH SILVER LAKE COPPER**  
**ARSENICAL LAKE COPPER**  
**COPPER OXIDE**

*Sales Representatives*  
60 EAST 42nd STREET, NEW YORK 17, N. Y.

## ADOLPH LEWISOHN SELLING CORPORATION

61 Broadway, New York

*Successor to*

**Adolph Lewisohn & Sons, Inc.**

## COPPER

MOLYBDENITE  
AND MOLYBDIC OXIDE

Sales Agent for

MIAMI COPPER CO.  
TENNESSEE COPPER CO.

## Electrolytic Lead Zinc Cadmium



**UNITED STATES SMELTING  
REFINING and MINING  
COMPANY, INC.**

SALES OFFICE  
57 William St. New York, N. Y.

## SUPERIOR

"All The Name Implies"



HIGH GRADE  
ZINC DUST

INTERMEDIATE GRADE  
SLAB ZINC



**SUPERIOR ZINC CORP.**

City Center Building — 121 N. Broad Street  
PHILADELPHIA 7, PA. — Works: Bristol, Pa.

# HIGHER DOMESTIC COPPER COSTS REQUIRE BOOST IN U. S. IMPORT TAX TO 4c WITH PERIL POINT OF 32c

## Outlook is Fairly Bright If Proper Measures Can Be Taken to Stabilize Conditions and Prevent Permanent Damage to Large Segment of Industry

By J. B. PULLEN, Assistant General Manager, Phelps Dodge Corporation

**A**NY PREDICTION as to the future outlook for copper will require a very careful appraisal of the present situation. The end of 1956 saw quite a change in the copper situation; a period of unparalleled prosperity in the industry came to an abrupt end. A prolonged shortage of the metal gave way to a pronounced surplus and prices started to tumble. During the year 1956 the Free World production of copper amounted to 3,015,000 tons against consumption of 2,783,000 tons, or an excess of production over consumption of 232,000 tons. Also during the year expanded facilities of operating mines and newly developed mines came into production, increasing productive capacity of the Free World to approximately 3,500,000 tons per annum.

During the early part of 1957 some companies found it necessary to curtail production and some of the high-cost producers were forced to suspend operations entirely. However, despite these cutbacks, production rates for the first six months of 1957 averaged slightly higher than the rate for 1956 and stocks of refined copper at the end of July were in excess of 430,000 tons—the highest since 1939.

From April 1956 to July 1957 world prices for copper dropped from 55 cents a pound to 27 cents a pound, and the domestic producers' price fell from 46 cents to 28½ cents.

### Free World Capacity

There are projects now in progress and other projects approved that will further expand the Free World productive capacity to approximately 4,150,000 tons by the end of 1961. Thus, the industry is faced with the situation where the productive capacity is clearly in excess of demand, and a price situation at present that will not provide for the economic operation of

a large segment of the American production.

The price situation existing in 1956 was largely due to artificial supports which began in 1954. In 1954 large-scale strikes closed down several important mines as well as smelters and refineries in the United States, Chile and elsewhere. This situation was further aggravated by a general upswing in business, both in this country and abroad. These two forces, opposing each other, continued throughout 1955 and as a result prices soared in the domestic market from 30 cents a pound in 1954 to over 46 cents a pound in the early part of 1956, and the foreign price reached a high of 55 cents during the same period.

Since April of 1956 the reverse has been true. The industry has been almost free of strikes and the business of key consuming industries such as automobiles, residential building, appliances and utilities has slackened, which, combined with expanded capacity, caused prices to take a precipitous drop as the old law of supply and demand came into play.

### Use of Substitutes

The short supply of the metal existing from 1954 to the early part of 1956, together with the rising prices, caused some concern in the industry over the use of substitute materials. It is difficult to determine just how serious this has been. The Department of Commerce issued a report in the Spring of 1957 covering 25 copper and aluminum consuming industries for the period 1947 to 1954. This report summarized the situation as follows:

"During the seven-year span markets for aluminum continued to expand in some cases along with copper but at greater rates and in other cases as a substitute for copper. In two cases, aluminum slipped back while copper uses forged ahead. In three cases both metals suffered losses in consumption. With the gap between aluminum prices and copper prices

narrowed to a small margin at the present time the uses of copper versus aluminum will depend more on the innate merits of the two metals for the particular application than on the sales price of the respective metals."

Statistics covering total consumption of copper for the above period indicate that copper maintained its average normal growth trend during this time. Total consumption figures since 1954 do not indicate that the uses of copper are diminishing; so it is concluded that fear of competition from substitutes is somewhat exaggerated.

If proper measures can be taken to stabilize the present and near term situation so as to prevent permanent damage to a large segment of the industry, then the long term outlook is fairly bright. The Department of Interior has recently issued a report in which the total world reserves of copper are estimated at 160,000,000 tons of metal. Of this total 144,000,000 tons are located in the Free World of which 25,000,000 tons are in the United States. Such reserves and the present and planned production capacity should provide an ample supply for many years to come.

### Criticism of Expansion

There has been some criticism of the industry for making and planning expansions at the present time. This criticism, I think, is unjustified. It cannot be expected that any major expansion in production capacity will be immediately matched by consumption. The time and money involved to bring a new ore body into production necessitates that such plans be based on long range projections rather than on the demands of any particular year.

Copper is a basic and in some cases an irreplaceable raw material for a great number of uses and all indications point to a normal and continuing growth in consumption of about 4 per cent per year.

The near term outlook, particularly

Address delivered before American Mining Congress, Salt Lake City, Utah, September 10, 1957.



for the American producers, is a matter that deserves serious consideration.

Production of copper in the United States accounts for about 42 per cent of the Free World's production. Consumption of copper in the United States is at present about 51 per cent of that in the Free World.

Due to the fact that productive capacity is so much in excess of actual demands and that stockpile requirements, both in the United States and in Britain, have largely been satisfied, the American producers can expect keen competition from all sources for the large domestic market.

### Mining Costs Up

It is not generally known how much underground mining costs have increased in the United States during the last 20 years. In some Arizona operations costs of producing copper have increased about 500 per cent. Roy Glover, chairman of the board of Anaconda in a statement made in March of this year, also found this same situation to exist. In the same statement Glover also estimated that about one-third of the entire production of the United States was produced at a cost in excess of 25 cents per pound.

In order to determine where the American producers stand in relation to their foreign competitors the following statistics covering ore reserves and wage rates were developed:

Partial Ore Reserves	Tons Ore	Per cent Copper
United States	2,100,000,000	0.925
Chile	3,500,000,000	2.000
Africa	800,000,000	3.050

In Canada a large percentage of the copper produced is from complex ores such as nickel-copper and zinc-copper, so that a true comparison of grades is not possible.

A report to the United States Senate Committee on Interior and Insular Affairs in July of 1955 gave the following information on foreign wage scales:

	Equivalent U. S. Currency
Bolivia Tin Miners—no date	\$2.01-\$2.20 per day
Chile Copper Miners—1953	\$3.08 per day
Colombia Miners—1953	\$4.46 per day
Peru Miners—June 1953	\$6.55 per week
Mexico Miners—1954	\$13.04 per week

A report from the Department of Labor of July 1957 gave the following data of foreign wage scales:

Canada—All Mining—1957	\$ 1.89 per hour
Northern Rhodesia—1954	
Native Labor—Surface	\$16.76 per month
Native Labor—Underground	\$18.94 per month

In March of 1957 the average hourly wages paid to Arizona miners amounted to \$2.43.

It is admitted that these figures do not represent a true comparison of actual labor costs; however, the two tabulations do indicate that the American producers are mining the lowest grade ore and paying the highest wages in the world.

A large percentage of the newly expanded capacity was solicited by the United States Government for security reasons. In a report by the United States Senate Committee on Interior and Insular Affairs in July of 1954 it was stated that projects developed under the Defense Production Act would add 250,000 tons of copper per annum to the American production. It is interesting to note that this expansion in production is just about the same figure as the surplus production for 1956.

To summarize the present and near term outlook for the American producer:

- (1) Productive capacity is in excess of demand;
- (2) Competition for the domestic market from low-cost foreign producers is serious;
- (3) Most of the American expanded facilities were solicited by the United States Government for security reasons;
- (4) Present prices will not permit the economic operation of a large portion of the United States industry; and
- (5) The domestic copper producer is now entering a cycle similar to that facing the domestic lead-zinc industry. This industry is in serious difficulties due to foreign competition.

The question now arises as to what consideration should be given to the domestic copper producer and what measures, if any, should be taken to protect this industry.

The first consideration should be that if it was necessary to expand capacity for national security reasons, then national security reasons demand that these operations be kept going.

The first consideration should be that copper provides the economic lifeblood for all the Western Mountain States; a cessation or serious curtailment of operations would create a serious economic problem in this area.

To keep this industry going, adequate import protection is necessary. This can be accomplished by raising the price peril point when an excise

tax is to be applied. This should be high enough to cover American cost of production and a reasonable profit. The excise tax should be raised to reflect the difference in cost between United States and foreign production. The question now arises as to just what the figures should be.

In 1951 when the peril point of 24 cents per pound was established, it was agreed to only after a long and exhaustive study. The 24-cent price apparently satisfied all concerned—the producer, the Government and the consumer—so I think it is safe to assume that the base of 24 cents at that time was fair and equitable. The Arizona Department of Mineral Resources in April of this year issued a report covering an exhaustive study of this problem. The findings and recommendations of this report are summarized as follows:

Apr. 1951 to Mar. 1957	Per Cent
Hourly wages (Arizona miners) increased	42.1
Supply costs increased	8.3
Taxes increased	56.0
Freight, refining and marketing increased	36.0

The weighted average of three large Arizona copper producers gave the following distribution of costs of producing copper:

Cost Distribution	Per Cent
Wages	42
Supplies	29
Taxes	13
Freight, refining, marketing	16

Distribution of the increased rates in proportion to their effect on costs will show that total costs have increased 33.1 per cent, as shown in the following table:

42 per cent of 42.1 per cent	
29 per cent of 8.3 per cent	
13 per cent of 56.0 per cent	
16 per cent of 36.0 per cent	
33.1 per cent equals Average increase in cost of production since April 1951.	

Hence, if the base of 24 cents per pound of copper was satisfactory in 1951, then today the base should be raised by 33.1 per cent, or approximately 8 cents, making the new base 32 cents per pound.

It is not possible to give any accurate cost figures at this time to show what differential exists between the cost of United States and foreign production; however, it is estimated to be in excess of 4 cents per pound. It therefore is recommended that the present 2-cent tax be increased to not less than 4 cents per pound.

This analysis indicates that the problems of the domestic copper industry are in the present and the near term. The future outlook depends on the satisfactory solution of these problems.

# U. S. LEAD PRICE LIKELY TO HOLD UNTIL DECEMBER; BOOST SHOULD FOLLOW TARIFF RISE LATE IN MONTH

Supply to Remain in Excess of Demand but With Relief in Sight Producers May Be Willing to Build Up Inventories in Hope of Appreciation in Value

By K. W. GREEN, Director of Purchases, The Electric Storage Battery Co.

**T**HE ECONOMIC troubles of the lead and zinc industries have occupied the recent attention of our President, the Congress and certain sectors of the public. All this trouble didn't happen at once but was the cumulative effect of repeated swings of the balance between supply and demand. The one who is hurt usually cries.

To look at this problem in retrospect, it is necessary to go back several years and analyze the conditions that led us to what some now term the brink of disaster. I shall try to sketch this as briefly as possible without skipping any salient features.

1950. Consumers' and secondary smelters' stocks were at the lowest ebb in our study from 1950 to date. Demand for lead rose to an all-time high of 1.24 million tons, spurred on by consumption of 398,000 tons by the storage battery industry. Primary producers' stocks dropped from 220,000 to 142,000 tons. The shortage in supply sent the domestic price from 10.5c in April to 17c in November when the Government froze the price. As always happens, consumers grabbed for more than they needed and sent their stocks upward the last two months. Against the above-mentioned demand, the year's production of 981,500 tons had little chance of balance. We were glad for the support of 452,000 tons of imports.

## Abnormal Demand

1951. The abnormal demand continued through the first five months at the average monthly rate of 114,000 tons compared with a domestic production of only 84,400 tons. In the last seven months the average monthly consumption rate dropped to 88,000 tons, but so did production drop—to 73,000 tons. The deficit had to be made up at the expense of consumers' and primary producers' stocks because, while our price was frozen, foreign lead flowed to the London market where the price had continued to

rise to 22.5c. Unless our precipitous drop in stocks could be arrested, we were heading for danger. Primary production in the second half dropped quite low, bringing sufficient pressure on the Government to grant relief in October by moving the frozen price from 17c to 19c.

## Tariff Suspended, Reimposed

1952. The first half was a nightmare. After months of whining, the tariff was suspended on Feb. 12th. Suddenly, world demand fell off and the London price toppled from 22c to 16.5c by June. The drop in our domestic price didn't occur until two months later so foreign lead poured into our market, imports reaching a peak of 64,000 tons in May. The tariff had to be reimposed June 26 to try to restore order. Domestic demand improved in the second half, exceeding the domestic production by 125,000 tons which would have permitted a normal flow of imports for good balance. However, world demand continued low causing the London price to nosedive to 11.25c in October. With a differential of 2.75c, imports shot upward to probably an all-time peak of 84,000 tons in December. Total imports for the year — 521,000 tons. This spelled trouble for 1953.

1953. Demand picked up in March and averaged 100,000 tons per month for the year. Domestic supply averaged 78,750 tons per month. Everything would have been fine if consumers bought all their requirements from domestic producers. Imports continued to pour in, averaging 38,000 tons per month for the first nine months. Then, as if by signal, imports dropped to 15,000 tons per month in the last quarter. But domestic producers' stocks rose steadily from 150,000 tons to 188,000 tons so they petitioned the Tariff Commission for relief under the "escape clause" of the Reciprocal Trade Agreements Act. Hearings were held and a recommendation was made to the President to grant relief in the form of increased tariff to the maximum extent authorized by law which is 150 per cent of

the Jan. 1, 1945 rate or 2.55c per pound.

## Stockpile Goods

1954. The President rejected the recommendation of the Tariff Commission saying it would not solve the industry's problem but it would disturb foreign trade relations. Instead, the Government announced a plan of buying 200,000 tons of lead for the permanent stockpile to meet a minimum defense requirement goal. In this year the consumption amounted to 1,095,000 tons. Domestic production was 957,000 tons, imports — 280,000 tons. Net result was further increase in everybody's inventory. The market was orderly and the price rose in two steps to 15c per pound.

1955. A remarkably steady year of market conditions. Consumption of 1,212,600 tons was high — second to 1950. Production was throttled by a 6 week strike at mid-year but still managed to total 996,000 tons by year end. Imports were 280,000 tons. The Government not only drained off the surplus but helped to liquidate 100,000 tons of overall stocks. The price rose to 15.5c in September and then to 16c late in December. Congress authorized \$600,000 to be spent by the Office of Minerals Mobilization for a study over a two-year period to determine and recommend a minerals policy.

## Price Steady in 1956

1956. Price was steady throughout the year at 16c. Consumption was about normal at 1,190,000 tons. Imports (270,000T) were the lowest since 1951. Total domestic production amounted to 1,002,000 tons. Of this amount, 613,600 tons were from primary producers who previously had averaged only 535,460 tons annually for the past nine years. Primary producers' stocks rose to a peak of 175,000 tons at mid-year, but year-end overall stocks differed very little from the beginning of the year.

There was some anxiety for the future because it was believed that the Government would soon reach the permanent stockpile goal. Fears were

Reprinted from September 11, 1957 Bulletin of National Association of Purchasing Agents.



temporarily allayed, however, by the cooperation of the Dept. of Agriculture in agreeing to barter some of our \$ billion dollar surplus in farm products for lead from foreign sources. Lead acquired this way was sold to the General Services Administration and transferred to a second stockpile from which it could be removed only by Congressional action.

#### 1957—Year of Indecision

1957. The year of indecision. The year began with overall stocks, excluding those held by the Government, at 311,000 tons of which primary producers held 157,000 tons. These values are modest. Late in April both the Lead and Zinc Industries Associations met to examine their position economically. Certainly the Zinc Industry was in far worse statistical position, but even in lead we faced the consequences of an anticipated oversupply of 175,000 tons. The Dept. of Interior reassured us that continuation of the barter plan would pick up the load when stockpile purchases reached their goal. One week later the Dept. of Agriculture thought otherwise and imposed restrictive conditions on all future bartering that killed the effectiveness of the plan. Dark days were ahead.

Here is the statistical position of lead for the first six months. Consumption amounted to slightly over 570,000 tons. Imports of 152,370 tons of refined lead were only a bit higher than normal. However, we are well on the way to a banner production year. Primary producers accounted for 307,300 tons, secondary producers another 200,000 tons. Primary production in April amounted to 56,170 tons, the highest monthly rate in the past nine years. Naturally, stocks have risen but not to an alarming extent, certainly not to the degree encountered in 1949, 1950 and 1954.

#### World Demand Mediocre

The world demand has been only mediocre. The price of lead on the London Metal Exchange (L.M.E.) took a sharp dive early in May. The differential (from our price) became so great that domestic producers were forced to drop our price in three steps from 16c to 14c to prevent a sudden deluge of imports. The latter price presumably is below the break-even point of domestic producers so the industry just had to have relief. The big bad wolf was "imports."

The industry turned to Congress for help. Ten different bills were proposed in the House and the Senate. Now legal procedure dictates that any tax bill must originate in the House Ways and Means Committee. From

there it goes to the floor of the House for action. Passing that step, it is then referred to the Senate Finance Committee for their review, then to the Senate Interior Committee and finally to the floor of the Senate for a vote. Assuming it has favorably passed both branches of Congress, the bill is then sent to the President for signature. Tariff bills become effective the date they appear in the Federal Register unless another date is stipulated.

#### Propose Sliding Taxes

Where was the Administration's long awaited minerals program? On June 19th the Secretary of the Interior sent a proposed draft bill, amending the Internal Revenue Code of 1954, to the President of the Senate asking for changes in import taxes on lead and zinc. A sliding scale excise tax would be substituted for the present tariff which has been part of a "General Agreement on Tariffs and Trade" (GATT) existing between various signatory Countries. A "peril point" of 17c was identified. At 17c or above, the excise tax would be suspended; 16c-17c the tax would be 1c; 15c-16c the tax would be 2c; and below 15c the tax would be 3c. This proposed bill was criticized by domestic producers as not providing sufficient protection.

An Industry Committee urged strengthening of the bill by providing a steeper excise tax schedule. Seventeen cents per pound was still recognized as the "peril point." If excessive imports break the 17c price, the tax would be 3c. At lower prices, two steps of 1c each were added making the ultimate provision for a 5c tax.

#### Hold Hearings

The Senate Finance Committee held a public hearing July 22 and 23 to give opportunity for expression of support or opposition to the proposed changes. The House Ways and Means Committee conducted similar hearings on Aug. 1 and 2. Congressmen, principally those representing mining States, voiced their opinions and reasons for need of industry protection. Representatives of foreign interests joined by some domestic producers pointed out that the proposed taxes were not the answer, they would not provide the protection industry was expecting, and that they would definitely harm GATT country economies which could provoke retaliation that might ultimately affect our foreign trade relations.

The time for adjournment of Congress was fast approaching. The Senate Finance Committee voted 11-2 on Aug. 16 in favor of a flat 3c tariff. The two dissenters threatened to

block further action on the floor of the Senate. The Chairman refused to "report out" on the bill until he received the approval of the State and Interior Departments. This was not obtained. Then another plan was attempted, that of tacking the proposed bill as a rider on a previously passed House bill dealing with mica imports. The House Ways and Means Committee was incensed at this action and served notice they would vigorously oppose the bill when it was returned to the House for reconciliation.

#### Escape Clause

The Chairman of the House Ways and Means Committee then released a letter to the President declaring that the President had all the authority needed under existing law to give whatever the lead and zinc industries may need. He was referring to the escape clause provision in the Reciprocal Trade Agreements Act. The President replied that he agreed, under the circumstances, to refer the matter to the Tariff Commission for expeditious study and recommendation. The chance for any passage of a relief bill by this Congress died then and there.

The Tariff Commission will undoubtedly require further hearings to which they must give 30 days notice. They will then review previous testimony and from all indicators they are expected to repeat their recommendation to the President. All of this takes time so it seems there is little chance for an increase in tariff in the next few months.

#### Lead Price Outlook

Purchasers of lead are usually consumers. Let us ponder what possible effect any of the probable moves might have on our own businesses. First, and most emphatic: You are going to pay more for lead in the future. The important thing now is when and how much. The tax bills generally referred to a 17c "peril point" so that seems like a minimum goal. Had any of the tax bills become laws, we would expect a further drop in the London price to balance the duty increase, then a prompt increase in the domestic price of lead followed by a parallel price movement in London.

Domestic producers have been willing to hold a 14c price during the summer lull in consumption when the London price has hovered around 91-92 pounds Sterling per ton, which is equivalent to approximately 13.5c at New York, duty paid. With the threat of immediate tariff increase removed, there appears little reason for the

(Continued on Page 13)

# WORLD COPPER OVER-PRODUCTION BLAMED AS U. K. QUOTATION DROPS TO LOWEST LEVEL SINCE 1950

Gov't Decision to Sell Red Metal From Stockpile Deepens Gloom in Market; Tin Affected by General Dullness; Lead and Zinc Prices Continue Steady

September 5, 1957

**A**S FAR AS the U. K. copper market is concerned, the outstanding feature during the past month was the announcement on August 20 by the Board of Trade that, pursuing a policy announced in the Government's Defense White Paper in 1956 of running down strategic holdings of industrial raw material, they intend to dispose of a further 27,000 tons of copper from stock.

Details of the method of disposal and of the rate at which the metal will be sold will not be announced until discussions have been held with Commonwealth producers and other trade representatives, but it was stated that the monthly rate of disposal is unlikely to exceed 2,700 tons. In any case, no copper will be offered for sale before October.

It is assumed in the market that the pattern of disposal will be somewhat similar to that previously adopted; that is to say, a substantial proportion will be sold back to the Commonwealth producers who originally supplied the metal, or their agents, and the remainder offered for open tender.

## Unfavorable Reception

Coming at a time when the copper market was weak and had earlier suffered very substantial price falls, this announcement received a very unfavorable reception from all sections of the copper trade here, who consider that its timing was very bad, not only from the point of view of the copper market, but also from that of the British tax payer. It is argued that as the original decision to release copper from the stockpile was taken in the early months of 1956, there could hardly be, after such a long lapse of time, any pressing urgency for further liquidation at this juncture.

It remains to be seen, of course, whether the metal will actually be offered from October onwards, but the news has certainly helped to deepen the gloom surrounding this market and has, no doubt, contributed to depressing prices to below £200 a ton for the first time since 1950. No one would suggest, of course, that this is the only

By L. H. TARRING  
London, England

## RST PRICE CHANGES

Changes in the Rhodesian Selection Trust's fixed electrolytic copper price, since it was established on May 9, 1955, and applicable to the RST's regular customers in the U. K. follow:

Date of Change	Pounds Sterling (Long Ton)	Equivalent in Cents Per Pound
1955		
May 9	280	35.00
August 2	325	40.625
September 5	360	45.00
1956		
February 27	385	48.125
April 30	350	43.75
May 28	320	40.00
June 18	300	37.50
July 2	275	34.375
August 1	300	37.50
October 15	280	35.00
October 24	265	33.125
November 12	280	35.00
December 17	270	33.75
1957		
February 1	250	31.25
February 19	240	30.00
June 14	230	28.75
July 1	220	27.50
August 12	210	26.25
September 5	200	25.00
September 9	190	23.75
September 12	200	25.00

bear point in the situation. The basic trouble is that world production continues to run ahead of consumption—the cuts which have already been announced in output have been fully offset by new production capacity coming into operation during the current year.

Actual consumption of copper in this country is not up to peak post-war levels, but it is really not at all bad and there is fairly general agreement that as the weak price and statistical position has been caused

mainly by production expansion rather than by consumption contraction, a healthy tone is unlikely to re-emerge until output is further trimmed to bring it into line with current needs.

In this connection, the fact that the American price followed the London trend (and early in September primary producers came down to 27 cents per lb.) may help to have a stabilizing effect by way of the increased tonnages which can be delivered to the U. S. Government at this level, under support contracts.

## Franc Devaluation

In the latter part of August, the virtual devaluation of the French franc started up a currency scare, with much talk of a possible devaluation of the £, and this was accompanied by a certain amount of buying of metals as a hedge against currencies, which rallied prices a little for a few days.

It appears, however, that despite the unfavorable movement of the British gold and dollar reserves, the Government has every intention of maintaining the £ at its present level. On the other side of the picture, the devaluation of the franc was accompanied by the suspension of French import licenses, and increased import taxes, but licensing has now been resumed again.

Another country beset by foreign exchange problems is Japan, who, although in recent years a heavy importer of copper and copper scrap, is

## U. K. COPPER STATISTICS

The British Bureau of Non-Ferrous Metal Statistics reports that at the end of June, stocks of copper in the U. K. were 64,121 tons (51,376 tons) compared with 61,991 tons (49,246 tons) at the end of May. Consumption declined to 51,254 tons (39,756 tons primary refined) compared with last month's improved figure of 58,116 tons (44,740 tons refined). U. K. production in June amounted to 16,221 tons (7,135 tons primary refined; 8,565 tons secondary refined and 511 tons secondary blister). Full consumption details are given below.

	—(Long Tons)—		
	—Gross Output—		
	6 months ending		
	June 1957	30th June 1957	1957
Unalloyed Copper Products			
Wire (1)	21,683	118,659	141,146
Rods, bars & sections	1,531	10,076	8,924
Sheet, strip & plate	4,526	29,380	29,498
Tubes	4,532	26,726	28,610
Castings & misc.	650	3,900	3,900
Alloyed Copper Products			
Wire	1,320	9,635	8,712
Rods, bars & sections	9,011	68,634	59,666

Sheet, strip & plate	7,011	63,680	45,792
Tubes	1,483	11,617	11,394
Castings & misc.	6,320	39,446	39,041
Copper sulphate	4,285	26,479	26,200

Total all products... 62,352 408,232r 402,883

Copper cont. of output	51,254	326,865r	331,247
Consumption of refined copper (2)	39,756	252,807r	262,700
Consumption of copper & alloy scrap (3) (copper content)	11,498	74,058r	68,547

Note: (1) Consumption of H. C. copper and cadmium copper wire rods for wire and production of wire rods for export.  
(2) Virgin and secondary refined copper.  
(3) Consumption of copper in scrap is obtained by the difference between copper content of output and consumption of refined copper, and should be considered over a period since monthly figures of scrap consumption are affected by variations in the amount of work in progress.  
r—Revised.

# AVERAGE BRITISH PRICES FOR COPPER, TIN, LEAD, ZINC

(Per Long Ton)

Mean of Bid and Asked Cash Quotation at Close of Morning Session on London Metal Exchange

	COPPER			TIN			LEAD		ZINC	
	Cash	3 Months	Settlement	Cash	3 Months	Settlement	Current Month	3rd Following	Current Month	3rd Following
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1954 Averages	248 17 11	239 17 7	249 0 11	719 8 11	709 17 7	720 6 7	98 8 12	94 7 4	78 5 4	77 16 11
1955 Averages	351 14 11	341 0 3	352 5 6	740 2 12	736 12 11	740 12 8	105 17 3	105 9 6	90 13 4	89 12 3
1956 Averages	328 14 5	324 13 1	329 1 8	787 14 9	774 7 7	788 13 3	116 6 5	114 8 9	97 14 3	95 3 7
1957										
January	265 17 11	264 14 4	266 3 2	789 3 2	771 10 5	789 16 4	116 5 1	114 10 8	103 5 1	98 13 8
February	245 11 2	244 2 0	245 16 3	770 16 9	752 9 6	771 8 6	113 3 0	112 6 11	99 8 11	96 17 0
March	239 10 11	239 2 9	239 14 6	770 14 6	756 8 7	771 7 2	113 2 1	112 6 11	96 12 3	94 15 9
April	241 19 2	242 15 9	242 2 0	774 4 9	768 7 6	774 17 6	111 17 5	111 14 1	96 7 6	94 13 5
May	237 17 5	238 1 2	238 0 3	765 8 1	763 8 6	765 15 3	99 9 3	99 16 1	85 15 7	82 8 3
June	227 2 8	228 16 2	227 5 9	762 10 0	759 14 9	762 16 10	91 13 9	91 19 9	74 6 1	73 16 4
July	217 10 12	219 11 9	217 14 9	753 2 8	750 3 8	753 13 1	90 12 3	91 4 11	75 3 1	73 14 11
August	208 12 3	210 12 7	208 15 9	740 0 9	748 18 1	740 6 8	91 14 6	92 0 3	73 17 10	73 13 9

currently talking of exporting electro in the not too distant future.

Stocks in London Metal Exchange warehouses have continued to rise, the figure at the end of August being 14,896 tons compared with only about 12,000 tons at the end of July. There has, however, been no widening in the contango and, indeed, for technical reasons, a small backwardation momentarily appeared.

## Tin Surplus Persists

Although tin is in a rather different position from other major metals by virtue of the operation of the International Tin Agreement, and the support this can give the market via the Buffer Stock Manager, tin prices have, nevertheless, been affected to some extent by the general dullness during the past month, and are now only £5 to £6 above the Buffer Stock minimum support level of £730 a ton.

From the behavior of prices, it would seem that consumers tend to come into the market for their needs at about this figure, rather than to wait for the uncertain possibility of being able to buy at a rock-bottom

## RISE IN BRITISH BANK RATE AFFECTS METAL MARKETS

The announcement on September 19 of the rise in the British Bank rate to 7 per cent from 5 per cent resulted in lower metal prices on the London Metal Exchange. The Bank action was expected to curtail speculative buying of metals as an inflation hedge, and result in metal inventory liquidation to lessen the cost of carrying stocks.

figure of £730. Everything points to the fact that the surplus of production over consumption persists, especially as the hoped-for revival in American consumer demand in the Autumn now seems to be a very doubtful starter.

However, since the Buffer Stock Manager is generally credited with still having large sums of money at his disposal for supporting the market as and when the need arises, everyone is convinced that £730 is a pretty solid floor price and in Kuala Lumpur recently, the President of the Federated Malay States Chamber of Mines, Sir Douglas Waring, stated pretty categorically that there will be no regulation of tin output this year, and probably not for some considerable time.

## Russia Exporting Less Tin

Meanwhile, it is of some interest to note that latest market estimates of the amount of tin being exported from Russia are less depressing than those made two or three months ago. The figure is now being put at about 500 tons a month or less, whereas at one time it was thought that Soviet shipments might be amounting to as much as 1,000 tons a month.

Stocks of tin in London Metal Exchange official warehouses during August rose by upwards of 800 tons to 3,855 tons and prices now register a moderate contango.

## Lead Market Dull

Lead is described in the text books as a dull, grey metal and that description pretty accurately fits lead market conditions in recent weeks.

Practically the only excitement — if excitement it can be called — during the peak holiday month of the year, has been studying the develop-

ments in connection with the proposed increased tariff protection for the U. S. industry.

Although for a time the picture seemed to be very confused, the market here now seems to have settled down to the idea that higher duties will probably be imposed before the year is out, even if these are not perhaps as high as the U. S. domestic producers wish. An open mind has been kept here as to the global effect of such a development.

## Would Depress Price

Most people are agreed that if it were to take place in market conditions analogous to those which currently prevail, the inevitable effect would be to tend to depress the price level in Europe and outside the United States. Indeed, it is doubtful whether it would do more than underwrite the present U. S. domestic quotation, especially bearing in mind the pretty broad hints that have been dropped that American Government stockpile buying is unlikely to continue for the whole of the current fiscal year.

On the whole, European consumption (Continued on Page 13)

## U. K. TIN STATISTICS

Stocks of tin at the end of June in the U. K. totaled 4,603 tons compared with 4,043 tons at the end of May, reports the British Bureau of Non-Ferrous Metal Statistics. Of this, consumers held 1,665 tons; against 1,609 tons the previous month. Production fell during the month to 2,757 tons (2,735 tons primary, 22 tons secondary) from 3,588 tons (3,564 tons and 24 tons) during May. Full details of consumption are given below:

	Long Tons		
	June 1957	6 mos. ending June 30th 1957	1957
Trade			
Tinplate	912	4,920	6,205
Tinning:			
Copper wire	57	251	281
Steel wire	6	56	50
Other	58	436	366
Total	121	743	697
Solder	155	1,492	1,064
Alloys:			
Whitemetal	228	1,476	1,376
Bronzes & gunmetal	192	1,397	1,249
Other	26	227	177
Total	446	3,100	2,802
Wrought tin (1)			
Foil & sheets	22	142	149
Collapsible tubes	26	171	155
Pipes, wire & capsules	6	24	36
Total	54	337	340
Chemicals (2)	99	502	572
Other Uses (3)	12	61	59
Total all trades	1,799	11,155	11,739

Notes: (1) includes Compo & "B" metal; (2) mainly Tin Oxide; (4) mainly Powder.

## U. K. LEAD STATISTICS

The British Bureau of Non-Ferrous Metal Statistics reports that during June, lead stocks in the U. K. increased by 1,344 tons to 42,146 tons, of which consumers held 23,478 tons (16,317 tons virgin; 7,161 tons English refined). Consumption during the month totaled 28,607 tons (31,574 tons in May) as detailed below:

	Long Tons		
	June 1957	6 months Jan.-June 1957	1957
Cable	10,072	58,377r	60,381r
Batteries—As metal	2,367	14,825	14,190
Battery oxides	1,874	14,036	11,968
Tetraethyl lead	1,729	10,505	10,577
Other oxides and compounds	1,812	12,988	11,537
White lead	798	5,518	4,768
Shot	320	2,406	2,227
Sheet and pipe	5,380	36,848	34,830
Foil and collapsible tubes	336	2,551	2,322
Other rolled and extruded	467	3,975	3,311
Solder	998	7,095	6,322
Alloys	1,360	8,329	8,430
Miscellaneous uses	1,094	6,277	6,293
Total consumption	28,607	183,680r	177,156r

of which:—

Imported virgin lead	15,346	89,288	84,046
English refined	5,713	41,977r	40,941r
Scrap including remelted	7,548	52,415r	52,169r

r—Revised.

METALS, SEPTEMBER, 1957



## British Metal Markets

(Continued from Page 12)

tion is holding up fairly well but is nothing to get excited about and barring possible repercussions from American tariff charges, the immediate outlook suggests that prices may continue at around their present level, since the market seems to show considerable resistance to any further decline around £90 a ton and few people can see any important factor on the bull side for the time being.

### Zinc Price Steady

Although during September metal will begin to come onto the market here from the release of Government strategic stocks, the price level has, on balance, kept very steady recently, after a temporary upward flutter occasioned by a certain amount of hedge buying against currency uncertainties.

It is believed that any further decline in price would make it quite uneconomical for many mines to ship concentrates to the smelters and had it not been for the heavy fall in ocean freights this year, even the present level would have been impracticable for the majority of producers. As it is, Mount Isa mines have ceased shipping until the price suitably improves.

The demand picture on this side of the Atlantic has changed very little in recent weeks. It is still thought that there is room for some improvement in buying for the motor car industry.

### U. K. ZINC STATISTICS

During June consumption of zinc in the U. K. fell to 25,202 tons from 29,589 tons in May, reports the British Bureau of Non-Ferrous Metal Statistics. U. K. output in June was 6,138 tons (6,698 tons in May) and stocks rose on the month by 1,384 tons to 37,384 tons, of which consumers held 17,861 tons and the LME official warehouses 1,083 tons.

Longs Tons		6 mos. ending	
	June 1957	30th June 1956	1957
Trade			
Brass	7,281	57,468	48,172
Galvanizing	8,007	54,831	55,846
of which: General	2,627	17,727	17,412
Sheet	2,693	16,144	20,154
Wire	1,626	11,213	10,880
Tube	1,661	9,747	7,400
Rolled zinc	1,667	12,020	11,713
Zinc oxide	2,285	14,298	13,422
Zinc diecasting and forming alloy	4,029	20,005r	20,530
Zinc dust	968	4,774	6,031
Miscellaneous uses	965	5,926	5,909
Total all trades	25,202	169,322r	161,623
of which:—			
Slab zinc			
High Purity (99.99%)	4,267	22,788r	22,622
Electrolytic & High Grade (99.95%)	4,435	32,713	29,171
G.O.B. Prime Western & Debased	9,850	65,187	66,188
Other virgin material	308	1,804	1,558
Remelted zinc	411	2,902	3,183
Scrap—(Zinc content)			
Zinc metal, alloys & residues	2,742	16,855r	16,866
Brass & other copper alloys	3,189	27,073	22,035

r—Revised.

**METALS, SEPTEMBER, 1957**

both in the form of die castings and brass products, but it is open to doubt whether this will make any very great difference to the general picture.

In zinc, as in lead, great interest has been shown in the political activities in the United States over the question of increasing import duties or taxes, and the feeling is perhaps a little more pronounced in connection with zinc, that when such an event occurs — for it is now assumed that it will — it is likely to have a depressing effect on open market prices on this side of the Atlantic.

## Washington Report

(Continued from Page 5)

cluding bonus payments of \$30 a ton unit.

### GSA Aluminum Buying

General Services Administration has reached agreement with three primary aluminum producers on revisions of the aluminum supply contracts which were entered into during 1950, 1951 and 1952 to meet urgent long-term requirements for aluminum which emerged during the Korean War. GSA signed agreements with Aluminum Co. of America, Kaiser Aluminum & Chemical Corp. and Reynolds Metals Co.

The agreed upon amendments to the contracts are within the framework of a recent ruling by the General Accounting Office interpreting the "put" rights under the contracts.

Under the original contracts, the companies undertook to enlarge their productive capacity by 658,475 short tons of aluminum per year. The contracts gave the companies the right to tender to the Government the production from the contract facilities in excess of the requirements of the producers for a five-year term.

Points covered by the negotiations:

1. Producers have agreed to deduct the full amount of primary aluminum purchased from other sources.

2. Producers have agreed that metal delivered to the Government shall be stockpile grade rather than meeting the previous lower minimum grade of 99.0 per cent purity.

3. Producers have agreed to sell the aluminum to the Government at the price prevailing at the time it is produced rather than at the time it is shipped.

4. The contracts formerly had specified that 25 per cent of the expended capacity be earmarked for non-integrated users for a period of 15 years after exploration of the put rights. Now the amount to be made so available to such users is 35 per cent of such capacity, an increase of 40 per cent. This will make a total of 230,466 short tons a year available to independent fabricators and extruders or a 15-year total of 3,456,990 tons worth nearly \$1,800,000,000 at today's market price of 26 cents a pound.

### Barter Program

The U. S. Department of Agriculture reported that barter contracts for

supplemental-type strategic materials signed during the fiscal year ended June 30 totaled \$227,600,000 compared with \$104,900,000 for fiscal year 1956. Contracts signed in June but committed earlier had a total value of \$3,700,000. The June total compares with \$6,500,000 in May, 1957, and \$200,000,000 in June, 1956.

Lead, on which commitments were made prior to recent changes in the barter program, was the only supplemental-type strategic material contracted for in June, 1957. Under USDA's barter program, Commodity Credit Corp.-owned farm commodities are exchanged for minimum, long-term, and supplemental-type strategic materials for stockpiling, and for materials for transfer to other Government agencies.

### Canadian Nickel

Acting Attorney General William P. Rogers declared International Nickel Co. of Canada, Ltd., has a "now declining but still substantial dominance" of the U. S. nickel market. He said the \$850,000,000 Uncle Sam has pumped into nickel expansion programs has reduced Inco's share of the market from 95 per cent in 1950 to about 66 per cent today. The future, he declared, "may well promise increasing competition with a resulting decline in Inco's present control over nickel supply."

Mr. Roger's views were transmitted to the White House and Congress. The U. S. Attorney General is required to make such quarterly reports on the possible anti-competitive effects of defense production expansion programs. The report said Government programs have boosted the U. S. supply of nickel from all sources to 290,000,000 pounds a year from 200,000,000 pounds in 1950. By 1961, supplies are expected to total 450,000,000 pounds, enough to meet all military and civilian requirements.

## Lead Price May Hold 'til December and Then Rise

(Continued from Page 10)

London price to drop much in the next few months.

Supply will continue in excess of demand but with relief in sight, it is quite possible that domestic producers will be willing to continue allowing their inventory to increase in the hope of appreciation in value later. On the positive side of reason for a sustained or stronger market are two conditions: Sept., Oct., and Nov. are normally high consumption months, and scrap dealers have been withholding scrap from the market waiting for higher prices.

Therefore, we expect the price to hold until December, look for a tariff increase late in December to be followed promptly by a price increase.

# United States Duties on Principal Ore and Metal Imports

(Including Revisions in Effect June 30, 1957, Under Geneva Agreements)

(Quantities Are in Pounds Unless Otherwise Stated; n.s.p.f. Stands for "Not Specially Provided For.")

## COPPER

**NOTE** — The excise tax of 4c a pound on copper (which was reduced to 2c a pound by the Geneva Trade Agreement) was suspended in April, 1947, until March 31, 1949, and on expiration it was further suspended until June 30, 1950. The tax was reimposed on July 1, 1950. It was suspended again on May 22, 1951, retroactive to April 1, 1951, and until February 15, 1953, and again until June 30, 1954. Suspension further extended to June 30, 1955, and again until June 30, 1958. If import tax is restored, the 1956 Geneva Agreement provides for 5% reductions effective on June 30 of 1956, 1957 and 1958, provided the price is above 24c; if the price is below 24c the 2c tax would prevail.

Copper ore and concentrates, usable as flux, etc., copper content	free
Copper ore and concentrates, product of Cuba and Philippines, copper content	free
Copper ore and concentrates, copper content	free
Regulus, black, or coarse copper, and cement copper, copper content	free
Unrefined black, blister, and converter copper in pigs or converter bars, copper content	free
Refined copper in ingots, plates or bars, copper content	free
Copper rolls, rods or sheets	1½c lb.
Copper seamless tubes and tubing	3½c lb.
Copper plain wire	12½%
Copper brazed tubes†	4.90c lb.
Old and scrap copper, fit only for remanufacture; and scale and clippings, copper content	free

## BRASS

Brass rods, sheets, plates, bars, strips, Muntz or yellow metal sheets, sheathing, bolts, piston rods, shafting and bronze rods, tubes and sheets	2c lb.
Brass tubes and tubing, seamless	2c lb.
Brass tubes, brazed, angles and channels	6c lb.
Brass and bronze wire	12½%

## LEAD

**NOTE** — Import duties on lead-bearing ores, flue dust, and mattes of all kinds, lead bullion or base bullion, lead in pigs and bars, lead dross, reclaimed lead and antimonial lead were suspended February 12, 1952, and reimposed on June 28, 1952. Lead scrap duty was reimposed July 1, 1952.

Lead-bearing ores and mattes, n. s. p. f., lead content	¾c lb.
Bullion or base bullion, lead content	1 1/16c lb.
Pigs and bars, lead content	1 1/16c lb.
Reclaimed, scrap, dross, lead content	1 1/16c lb.
Babbitt metal and solder, lead content	1 1/16c lb.
Pipe, sheets, shot, glaziers' lead, and wire	1 5/16c lb.
Type metal and antimonial lead, lead content	1 1/16c lb.
White lead	1.05c lb.
Litharge	1¼c lb.
Red lead	15/16c lb.
Orange mineral	1c lb.

## ZINC

**NOTE** — Import duties on zinc-bearing ores, and on zinc in blocks, pigs and slabs were suspended February 12, 1952, and reimposed on July 1, 1953.

Zinc-bearing ores, except pyrites containing not more than 3% zinc, zinc content	6/10c lb.
Zinc contained in zinc-bearing ores, n. e. s., not recoverable, zinc content	6/10c lb.
Zinc, old and worn out, fit only for remanufacture	¾c lb.
Dross and skimmings	¾c lb.
Zinc in blocks, pigs or slabs	7/10c lb.
Zinc in sheets	1c lb.
Zinc sheets, plated with nickel or other base metal, or solutions	1½c lb.

Zinc dust	7/10c lb.
Zinc die-casting alloys	12½%
Zinc oxide and leaded zinc oxides containing not more than 25% lead, dry	3/5c lb.
ground in or mixed with oil or water	1c lb.

## MISCELLANEOUS METALS AND ORES

Aluminum, metal and alloys, crude, except alloys elsewhere provided for†	1.30c lb.
Aluminum scrap	free
Aluminum plates, sheets, bars, rods, circles, squares, etc.†	2.70c lb.
Antimony ore, antimony content	free
Antimony metal and regulus	2c lb.
Antimony needle or liquidated	¼c lb.
Antimony oxide	1c lb.
Antimony sulphides	½c lb. & 12½%
Arsenic, metallic†	2.70c lb.
Arsenious acid or white arsenic	free
Bauxite, crude*	free
Bauxite, refined**	¼c lb.
Bismuth	1⅞%
Bismuth salts and compounds	35%
Beryllium metal†	22½%
Beryllium ore	free
Cadmium	3¾c lb.
Cadmium flue dust, cadmium content	free
Chrome ore or chromite	free
Chrome or chromium metal†	11%
Cobalt metal	free
Cobalt ore and concentrates, cobalt content	free
Magnesium, metallic†	14.30c lb.
Magnesium powder, sheets, wire†	18c lb. & 9½%
Magnesium alloys†	20c & 10%
Magnesium scrap	free
Manganese ores, containing over 10% manganese, manganese content	¼c lb., except Cuba, free
Molybdenum ore or concentrates, molybdenum content†	31½c lb.
Nickel ore, matte and oxide	free
Nickel and alloys, nickel chief value, n. s. p. f., in pigs, ingots, shot, cubes, grains, cathodes, or similar forms	1¼c lb.
Nickel, bars, rods, plates, sheets, castings, strips, wire or electrodes	12½%
Nickel scrap	free
Nickel tubes, tubing	6¼%
(if cold rolled, drawn or worked — 2½% extra)	
Platinum, grain, nuggets, sponge and scrap, oz. troy	free
Platinum in ingots, bars, sheets, or plates, not less than ⅛ in. thick, oz. troy	free
Platinum, ores, platinum content, oz. troy	free
Quicksilver or mercury	25c lb.
Selenium and salts	free
Tantalum	12½%
Tin ore, cassiterite, and black oxide of tin, tin content	free
Tin in bars, blocks, pigs, grain, granulated, and scrap, and alloys, chief value tin, n. s. p. f.	free
Tungsten ore or concentrates, tungsten content	50c lb.

\*Crude bauxite import duty suspended to July 15, 1958. \*\*Under Public Law 25 alumina imported for use in aluminum production is free for entries from July 17, 1956 to July 16, 1958. †Tariff to be reduced 5% on June 30, 1958, under Geneva Agreement which expires on June 30, 1959.



# REAL PRICE STABILITY IN COPPER UNLIKELY UNTIL FURTHER CUTBACKS ARE MADE IN WORLD PRODUCTION

U. S. Producers at 27c, Smelters at 26c; Lead, Zinc Markets Steady;  
Tin Moves in Narrow Range; Silver, Quicksilver and Platinum Weaker

September 17, 1957

**P**LUNGING copper prices paused briefly during the month in review and showed signs of strengthening. But it was too early at this writing to tell whether the upward trend was only a flash-in-the-pan or that pay dirt had been hit. Most trade quarters appeared to be of the opinion that no real price stability can be achieved in copper until world overproduction of the metal is corrected to a greater extent than it has been.

Primary copper producers maintained their 27.00c a pound delivered price for electro, fully established on September 4, and down 1.50c from the 28.50c level which had been in effect since August 8. The custom smelter quotation slumped from the last price of 28.25c in this space, established on July 19, to 25.00c on September 9. On September 12, however, the smelter price moved up to a range of 25.00 to 25.50c, and on September 13 all smelters quoted 26.00c and did business at that level.

Lead and zinc quotations were steady, at 14.00c a pound New York for the former and 10.00c a pound East St. Louis for the Prime Western grade of the latter. Spot Straits was quoted at 93.75c a pound New York on September 16, down 0.75c from the last level noted in this space of 94.50c, for August 8.

Although special charges on certain aluminum products were reduced, producers maintained their 28.10c a pound quotation for 30-pound primary aluminum ingots, 99.5% plus grade. Silver fluctuated and was quoted at 90.625c an ounce at New York on September 15. Platinum and quicksilver displayed weaker tendencies, with the former available at \$81-\$87 an ounce and the latter at \$245-\$250 a flask.

## Copper Price Trend

The previously-noted declines in domestic producer and smelter electro copper prices generally followed the downward movement for the metal in overseas markets. On the London Metal Exchange the electro copper price slid to the equivalent of 22.875c a pound on September 9, and the Rhodesian Selection Trust quotation dipped to the equivalent of 23.75c.

The large Belgian producer, Union Minière du Haut Katanga moved its price down to a basis of 24.50c a pound Antwerp or c.i.f. New York on September 10, and the French agency (GIRM) cut its selling price to a basis

of 24.92c a pound f.a.s. New York on September 12.

An upswing got under way on the LME on September 11, continued on the 12th and on the 13th had reached the equivalent of 25.56c a pound. Domestic smelters were quick to join the upward trend, moving to 25.00 to 25.50c on the 12th and to 26.00c on the 13th. The smelter price was maintained on the 16th. Developments favorable to the market were: the British Board of Trade announced it was postponing the sale of 27,000 tons of copper from the British Government's stockpile because of the "disturbed state" of the market; the Rhodesian Selection Trust fixed price to British consumers was increased to £200 per long ton (the equivalent of 25.00c a pound); the Belgian producer advanced its copper price to a basis of 25.50c c.i.f. New York and the French agency increased its price to 25.78c f.a.s. New York.

## Unfavorable Developments

At this writing, there also were unfavorable developments. The LME price started downward again on September 16 and on the 17th closed at the equivalent of about 24.09c. Domestic smelters cut their scrap copper buying prices to a basis of 19.50c for No. 2 heavy copper and wire, down 0.50c from the 20.00c level established when they moved up to 26.00c for electro. Consumers of fabricated copper and brass products continued to display hesitancy and, most important, there was no real change in the production picture which had been the main cause of the recent declines.

Sir Ronald Prain, chairman of the Rhodesian Selection Trust group, has issued a call for a 10 per cent cutback by the producers who control two-thirds of the free world's copper production. The RST mines cut their output by 10 per cent in June. Sir Ronald also described the recent price decline as "overdone."

## Cutback Picture

Copper industry leaders who attended the recent American Mining Congress made it plain they are giving careful consideration to further cutbacks. Further cutbacks may be necessary if the copper price is to be maintained, it was pointed out.

Phelps Dodge announced another cutback in production (of 5 per cent or 1,250 tons a month) on September 17; including previous cutbacks made in November, 1956 and March, 1957 (of 10 per cent or 2,250 tons a month), the company's output so far has been curbed 15 per cent or around 3,500 tons a month. Anaconda's U. S. mine

production also has been cut, by 3,000 tons to around 9,500 tons a month. But Kennecott Copper Corp., as yet, has announced no cutbacks. A Kennecott official said, however, that the latest primary price reduction (to 27.00c) made its Nevada mine operations more difficult. Nevada produces about 3,000 tons of Kennecott's total domestic output of 34,000 tons.

## Minor Curtailments

Minor production cuts have been announced, during the month in review, in other directions. Calumet & Hecla reported it was cutting output at its Michigan-area mines, costing the company about 10 per cent of its production. Last year Calumet & Hecla produced 19,200 tons, slightly less than 2 per cent of U. S. copper output. The Chilean Government also announced it was closing some copper mines because of the sharp declines in world copper prices. The affected Chilean facilities produce about 25,000 tons annually, or about 6 per cent of that country's 1956 output of 539,839 tons. These mines are not worked with methods as technically advanced as those applied by U. S.-owned mines in Chile. The Chilean Government also emphasized it was determined, despite the price increase, to keep or increase output in mines owned by subsidiaries of Anaconda and Kennecott.

## August Copper Statistics

Features of the August copper statistics included sharp increases in shipments at home and abroad, with little change in output and stocks. Domestic August figures follow, in tons, with July totals in parentheses:

Refined output, 128,480 (127,434); deliveries to fabricators, 107,522 (84,702); stocks in hands of producers at end of month, 192,931 (191,515).

Accompanying the decline in the primary producer copper price to 27.00c were reductions by brass and wire mills, the full copper products being reduced 1.50c a pound and proportionately for alloy items, depending on copper content. Brass mills also reduced their scrap copper buying prices to reflect copper at 27.00c.

The fall and rise in the smelter electro copper quotation was accompanied by a decline and advance in prices for brass and bronze ingots; a reduction of 1.00c to 1.50c on September 9 and an increase of similar proportions on September 13.

## Lead, Zinc Steady

Stability keyed both the domestic lead and zinc markets. Moderate consuming demand was noted for

lead, much of the demand being for shipment this month. Lead buying in volume for October shipment is expected to be felt shortly. Lead was unchanged at 14.00c a pound New York and 13.80c St. Louis.

In spite of the fact that the output of slab zinc is still running in excess of consumption, and that were it not for the tonnages that the Government buys each month for the long-term stockpiling program there would be much larger increases in the unsold stocks that are in producers' hands, nevertheless there has been no selling pressure in evidence and no attempt to shade prices. Whatever business is done is either at the spot price of 10.00c a pound East St. Louis for the Prime Western grade or at the monthly average.

Zinc made a better showing statistically in August than it had for several months. August statistics for all grades of zinc follow, in tons, with July totals in parentheses: production, 84,166 (85,779); total shipments, 81,049 (73,055); shipments to domestic consumers, 70,318 (57,862), and for Government account, 9,871 (11,186); stocks at end of month, 149,296 (146,179); unfilled orders at end of month, 31,663 (28,296).

#### Tin Market Slow

The domestic tin market has been on the slow side, with the current long-distance telephone strike making it difficult for importers to con-

tact their out-of-town customers. Spot Straits tin at New York closed at 93.75c on September 16, as against the last quoted price in this space of 94.50c for August 8. The high for the August 8-September 16 period was the 94.50c level registered on August 8, 12, 15, 16, and 17, while the low of 92.87c occurred on September 6.

#### Primary Aluminum Unchanged

Primary aluminum prices were unchanged during the month in review but there were further indications that supplies were mounting. Reynolds Metals Co., one of the "Big Three" primary producers, announced reduction of special charges on extra large dimensions of non-heat-treatable aluminum alloy plate. Reynolds new pricing policy means price cuts of up to 4.90c a pound on widths and diameters in excess of 84 inches in plates and plate circles.

Southwire Co. of Atlanta, Ga., an aluminum wire fabricator reduced its list prices in an attempt to stabilize prices. Industry people, however, wondered if the move will succeed because the wire has actually been selling at levels below the new list quotations. Southwire cut reinforced aluminum wire 3.00c a pound and covered aluminum or insulated wire from 15 per cent to 20 per cent per linear foot, with the company's Swan No. 4 ACSR (aluminum conductor steel reinforced) dropped from 40.98c a pound to 37.08c. Trade quarters noted

that ACSR wire has been selling for from 6.00c to 8.00c a pound below list price and in some cases close to the 26.00c a pound price for pig aluminum.

#### Silver Lower

The New York silver price on September 16 was 90.625c an ounce, as against the last quoted level in this space of 91.125c, established on August 8. During the period in review the silver price dropped 0.25c an ounce to 90.875c on August 16; dipped another 0.25c to 90.625c on August 26; dropped to 90.16c on September 13, and partially recovered to 90.625c on September 16.

#### Quicksilver Weakens

Spot quicksilver on September 16 was quoted at \$245 to \$250 per flask of 76 pounds as against the previous range of \$252 to \$255 last noted in this space. The spot price dipped to \$250-\$255 on August 16, to \$246-\$250 on September 12 and to \$245-\$250 on September 16. The supply situation was described as adequate, reflecting improved domestic mine output. Indications were that business could be done at below the \$245 level. Sellers asserted it was not so much a question of price but rather one of finding a buyer.

#### Platinum Easier

Platinum continued to ease at the dealer level, and was available at \$81 an ounce. The refiner price was maintained at \$84-\$87, so that the market ranged from \$81 to \$87 an ounce.

## NATIONAL BUSINESS PUBLICATIONS

*Promoting Trade the World Over Since 1905*

**WASTE TRADE JOURNAL (Weekly)** — The leading market authority on scrap and waste materials of all kinds. Read by producers, dealers and consumers all over the world.

**DAILY METAL REPORTER** — The recognized authority on iron, steel and metals reaching all important dealers, brokers, steel mills, foundries, mining companies, manufacturers and consumers of iron, steel, copper, tin, lead, zinc, aluminum.

**DAILY MILL STOCK REPORTER** — The recognized medium covering all raw material markets every day in the Wool, Cotton, Pulp, Rags, Waste Paper, Papermakers' Supplies, Burlap, Bags, Textile Wastes and Fibre trades.

**SALES** — A weekly publication listing and reporting Government sales of surplus war materials, also lists all bidders and awards.

**DAILY SURPLUS SALES RECORD** — Lists all Government sales of surplus war materials and industrial auctions of all types of raw materials, machinery, equipment, supplies, clothing, textiles, chemicals, etc. Also lists the names of bidders, awards and prices.

**METALS** — Published monthly, enjoys a world-wide circulation to those interested in the production, consumption or trading in non-ferrous metals and metal products.

**INTERNATIONAL WASTE TRADE JOURNAL** — The semi-annual import and export number of the "Waste Trade Journal" published April and October. Circulation worldwide to importers and exporters everywhere as the international authority on the scrap, waste and secondary raw materials industries.

**WORLD MARKETS DIRECTORY** — International Trade Guide listing over 60,000 importers and exporters of commodities, merchandise and raw materials. Commodity index printed in English, French and Spanish.

**STANDARD METAL DIRECTORY** — The authoritative reference guide for the iron, steel and metals industries. Detailed reports on steel mills and foundries — Officers, capitalization, equipment, capacity, products, raw materials consumed.

**WASTE TRADE DIRECTORY** — Comprehensive in its classification of the waste materials industry, with lists of dealers, brokers, graders, packers, importers, exporters and consumers.

**WORLD'S WASTE TRADE DIRECTORY** — An International Index of importers and exporters of scrap and waste materials throughout the world, covering scrap iron, metals, rubber, rags, waste paper, textile waste, used bags, etc.

**MINES REGISTER** — Successor to the Mines Handbook (est. 1900). A detailed description of over 7,500 active metal mines and listing approximately 22,000 mining companies of North, Central and South America.

**WIRE SERVICE** — A special telegraph and telephone service on market developments and price changes in copper, tin, lead, zinc, aluminum, iron and steel.

**WORLD CHEMICAL DIRECTORY** — An International Index of importers, exporters and manufacturers of chemicals, drugs, plastics, oils, etc. Commodity Listings in French, Spanish and English. Contains four sections — Commodity Index — Commodity Classifications — Geographical Section — Brand and Trademark Section — all important sources of supply and distribution for international trade.

**WORLD TEXTILE DIRECTORY** — An international index listing in three languages the importers and exporters of raw cotton, wools, silk, rayon, yarns, fibres, burlap, jute, flax, linen, textile wastes, piece goods, all textile manufacturers, etc.

NATIONAL BUSINESS PRESS

425 West 25th Street, New York 1, N. Y.

# Daily Metal Quotations in August, 1957

The following quotations are taken from the Daily Metal Reporter  
(In Cents Per Pound)

	Copper			Tin			Lead		Zinc		Alumi- num		Anti- mony		Silver	
	Producers' Price	Del. Conn.	Custom Smelters' or Outside Price	Electro. f.o.b. Refinery	Lake Del.	Average Electrolytic Export Price U.S. N. Y.	Spot	Straits New York	Prime West. f.o.b. St. Louis	Brass Spec. f.o.b. St. Louis	High Grade Delivered	Spec. High Grade Delivered	30-lb. Ingot (f.o.b.) 99% Plus	Domestic Spot 99.5% f.o.b. Laredo	(Cents Per Ounce) New York	
1	29.25	28.25	28.25	28.35	29.25	27.50	95.25	14.00	10.00	10.25	11.35	11.75	28.10	33.00	90.875	
2	29.25	28.25	28.25	28.35	29.25	27.50	95.25	14.00	10.00	10.25	11.35	11.75	28.70	33.00	90.875	
3	29.25	28.25	28.25	28.35	29.25	27.50	95.25	14.00	10.00	10.25	11.35	11.75	28.10	33.00	90.875	
5	29.25	28.25	28.25	28.35	29.25	27.375	95.375	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.875	
6	28.875	28.25	28.25	28.35	28.50	27.125	95.00	14.00	10.00	10.50	11.35	11.75	28.10	33.00	91.125	
7	28.875	28.25	28.25	28.35	28.50	27.125	94.625	14.00	10.00	10.50	11.35	11.75	28.10	33.00	91.125	
8	28.50	28.25	28.25	27.975	28.50	27.125	94.50	14.00	10.00	10.50	11.35	11.75	28.10	33.00	91.125	
9	28.50	28.25	28.25	27.975	28.50	27.00	94.375	14.00	10.00	10.50	11.35	11.75	28.10	33.00	91.125	
10	28.50	28.25	28.25	27.975	28.50	27.00	94.375	14.00	10.00	10.50	11.35	11.75	28.10	33.00	91.125	
12	28.50	28.25	28.25	27.975	28.50	26.75	94.50	14.00	10.00	10.50	11.35	11.75	28.10	33.00	91.125	
13	28.50	28.25	28.25	27.975	28.50	26.75	94.00	14.00	10.00	10.50	11.35	11.75	28.10	33.00	91.125	
14	28.50	28.25	28.25	27.975	28.50	26.75	94.25	14.00	10.00	10.50	11.35	11.75	28.10	33.00	91.125	
15	28.50	28.25	28.25	27.975	28.50	26.75	94.50	14.00	10.00	10.50	11.35	11.75	28.10	33.00	91.125	
16	28.50	28.25	28.25	27.975	28.50	26.75	94.25	14.00	10.00	10.50	11.35	11.75	28.10	33.00	91.125	
17	28.50	28.25	28.25	27.975	28.50	26.75	94.50	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.875	
19	28.50	28.25	28.25	27.975	28.50	26.75	94.50	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.875	
20	28.50	28.25	28.25	27.975	28.50	26.75	94.375	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.875	
21	28.50	27.75	27.75	27.725	28.50	26.75	94.25	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.875	
22	28.50	27.25	27.25	27.475	28.50	26.00	94.125	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.875	
23	28.50	27.25	27.25	27.475	28.50	26.00	93.875	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.875	
24	28.50	27.25	27.25	27.475	28.50	26.00	93.625	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.875	
26	28.50	27.25	27.25	27.475	28.50	25.75	93.50	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.625	
27	28.50	27.25	27.25	27.475	28.50	25.75	93.375	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.625	
28	28.50	27.00	27.00	27.35	28.50	25.75	93.25	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.625	
29	28.50	27.00	27.00	27.35	28.50	25.625	93.125	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.625	
30	28.50	27.00	27.00	27.35	28.50	25.625	93.125	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.625	
31	28.50	27.00	27.00	27.35	28.50	25.625	92.875	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.625	
AV.	28.639	27.862	27.862	27.864	28.611	26.598	94.261	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.909	
HL.	29.25	28.25	28.25	28.85	29.25	27.50	95.375	14.00	10.00	10.50	11.35	11.75	28.10	33.00	91.125	
LO.	28.50	27.00	27.00	26.60	28.50	25.50	93.125	14.00	10.00	10.50	11.35	11.75	28.10	33.00	90.625	

*Your Best Market This Week For*

# MIXED ALUMINUM CLIPPINGS

## Aluminum Smelting & Refining Co., Inc.

5463 DUNHAM ROAD

BEDFORD, OHIO

Tel. Cleveland: MONTROSE 2-3100

For 5 STAR Service Call GENERAL

**ZINC**



**ALUMINUM**

SLAB ZINC DROSS  
ZINC ASHES

DIE CAST  
SCRAP ZINC

LOW COPPER  
CLIPS

TURNINGS  
MIXED CLIPS

## GENERAL SMELTING CO.

Philadelphia 34, Pa.

In Business since 1902

✓ Just as the water in a pool reflects images, Franklin's formula of "efficient sampling + careful assay" reflects itself in consistently greater returns for metal sellers.

✓ We pay top dollar for your

### COPPER-BEARING MATERIALS

skimmings • grindings • offings  
mixed turnings • refinery brass  
irony brass • slags and residues.  
Also low-grade white metal slags  
containing tin and copper and  
zinc or lead residues.

✓ For a "reflection" you'll like  
to see . . . call Franklin today.

## REFLECTIONS

## FRANKLIN SMELTING & REFINING CO.

CASTOR AVENUE EAST OF RICHMOND STREET  
PHILADELPHIA 34, PA. • NEbraska 4-2231



# Copper Brands

Deliverable Against Commodity Exchange, Inc.

Brand or Marks	Producer	Grade	Brand or Marks	Producer	Grade
B. E. R.	American Smelting & Refining Co. (Baltimore, Md.)	Electrolytic	C & H	Calumet & Hecla Consolidated Copper Co.	Lake Lake
P. A.	American Smelting & Refining Co. (Maurer, N. J.)	Electrolytic	C. R.	Copper Range Company	Lake Lake
T	American Smelting & Refining Co. (Tacoma, Wash.)	Electrolytic	Q. M. CO.	Quincy Mining Company	Lake Lake
B. & M. AE	Anaconda Copper Mining Co.	Electrolytic			
BOLIDEN	Andes Copper Mining Co.	Electrolytic			
C. C. R.	Bolidens-Gruvaktiebolag	Electrolytic			
	Canadian Copper Refiners Ltd. (Montreal)	Electrolytic			
C de P Peru	Cerro de Pasco Corporation	Electrolytic			
C. C. C.	Chile Copper Company	Electrolytic			
F E C	Falconbridge Nickel Mines, Ltd.	Electrolytic			
K U E	Kennecott Copper Corp.	Electrolytic			
L. M. C.	Lewin Metals Corporation	Electrolytic			
M U F	Mufulira Copper Mines, Ltd.	Electrolytic			
N A	Norddeutsche Affinerie	Electrolytic			
O R C	Ontario Refining Co., Ltd.	Electrolytic			
A. L. S.	Philips Dodge Refining Corp. (For Adolph Lewishohn Selling Corp.)	Electrolytic			
L. N. S.	Philips Dodge Refining Corp.	Electrolytic			
P * D	Philips Dodge Corporation	Electrolytic			
N. E. C.	Raritan Copper Works	Electrolytic			
R E C	Rhokana Corporation	Electrolytic			
B O R	Rudnici Bakra i Topionice	Electrolytic			
U M K	Union Miniere du Haut Katanga	Electrolytic			
D R W	†United States Metals Refining Co.	Electrolytic			
AMCO	†United States Metals Refining Co.	Electrolytic			
OFHC	†United States Metals Refining Co.	Electrolytic			
W E K	Zinnwerke Wilhelmsburg G.m.b.H.	Electrolytic			

†Subsidiary, The American Metal Co., Ltd.

## Official List of Approved Refiners Whose CATHODES are deliverable against Commodity Exchange, Inc., Copper Contract

American Smelting & Refining Co.	Mufulira Copper Mines, Ltd.
Anaconda Copper Mining Co.	Norddeutsche Affinerie
Andes Copper Mining Co.	Ontario Refining Co., Ltd.
Bolidens Gruvaktiebolag	Philips Dodge Refining Corp.
Canadian Copper Refiners, Ltd.	Philips Dodge Corporation
Cerro de Pasco Copper Corp.	Raritan Copper Works
Chile Copper Company	Rhokana Corporation
Consolidated Mining & Smelting Co.	Rudnici Bakra i Topionice
Falconbridge Nickel Mines, Ltd.	Union Miniere du Haut Katanga
Kennecott Copper Corp.	United States Metals Refining Co.
Lewin Metals Corp.	Zinnwerke Wilhelmsburg G.m.b.H.

# Lead Brands

Refined At	Producer	Brand Mark
Federal, Ill., U. S.	American Smelting & Refining Co.	*ALTON
Carteret, N. J., U. S.	United States Metals Refining Co.	**A M CO
Monterrey, Mexico	American Smelting & Refining Co.	*ASARCO MONTERREY
Port Pirie, Australia	Broken Hill Associated Smelters	*B.H.A.S.
Indianapolis, Ind., U. S.	National Lead Co., American Lead Plant	†aBLUE ARROW AMERICAN LEAD CORP
Braubach a/Rhein, Germany	Blei-und Silberhutte Braubach	*Braubach dopp. raff. Deutschland
Idaho, U. S.	Bunker Hill Smelter	*BUNKER "C" HILL
Orya, Peru	Cerro de Pasco Copper Corp.	*CERRO PERU
Collinsville, Ill., U. S.	St. Louis Smelting & Refining Co.	†aCHEMICAL ST. L. S. & R. CO.
Monterrey, N. L., Mexico	Compania Metalurgica Penoles, S.A.	**C.M.F. y A.M.
Alton, Ill., U. S.	St. Joseph Lead Company	*DOE RUN
Oker, Germany	Unterharzer Berg- und Huttenwerke	*HARZ 99.985, HARZ 99.9
Joplin, Mo., U. S.	Eagle-Picher Mining & Smelting Co.	*EAGLE-PICHER
Kamiooka, Japan	Mitsui Mining Co.	*E.M.K.
Stolberg, Rhineland, Germany	Stolberger Zinc Aktiengesellschaft fur Bergbau und Huttenbetrieb	*Eschweiler raffine
Federal, Ill., U. S.	American Smelting & Refining Co.	*FEDERAL
Chicago, Ill., U. S.	Goldsmith Bros. Smelting & Refining Co.	†G B
Hoboken, Belgium	Societe Generale Metallurgique de Hoboken	*H.E.R. Escaut
Alton, Ill., U. S.	St. Joseph Lead Company	*HERCULANEUM
Omaha, Neb., U. S.	International Smelting & Refining Co.	*ILR
Monanto, Ill., U. S.	Lewin-Mathes Co.	†MONSANTO
Montepioni, Italy	Societa di Montepioni	*Montepioni
San Gavino Monreale, Sardinia, Italy	Montevocchio Societa Italiana del Piombo e dello Zinco	*Montevocchio
Hammond, Ind., U. S.	Metals Refining Company	†M R CO METALS REFINING CO.
Omaha, Neb., U. S.	American Smelting & Refining Co.	*OMAHA & GRANT
Overpelt, Belgium	Compagnie des Metaux d'Overpelt-Lommel et de Corphallé, S.A.	*Overpelt extra-raffine O.V.-L.L.-Dur.
Magrine, Tunis	Ste. Min. & Metall. de Penarroja	*Penarroja
Penarroja, Sopwith & Cartagena, Spain	Ete Min. & Met. de Penarroja	*Penarroja
Perth Amboy, N. J., U. S.	American Smelting & Refining Co.	*PERTH AMBOY
Genoa, Italy	Societa di Pertusola	*Pertusola
Alton, Ill., U. S.	St. Joseph Lead Company	*ST. JOE
Collinsville, Ill., U. S.	St. Louis Smelting & Refining Co.	†aST. L. S. & R. CO.
Selby, Calif., U. S.	American Smelting & Refining Co.	*SELBY
Trail, B. C., Canada	Consolidated Mining & Smelting Co. of Canada, Ltd.	*TADANAC
Baelen-Usines, Belgium	Ste des Mines and Foundries de Zine de la Vieille-Montagne Anglem	*Three Stars Vieille-Montagne Bar
Mexico, Yugoslavia	Central European Mines, Limited	*TRECA
Perth Amboy, N. J., U. S.	American Smelting & Refining Co.	*TUMCO
Hoboken, Belgium	The Tsumeb Corporation	*TUMCO
Midvale, Utah, U. S.	United State Smelting, Refining & Mining Company	*USS CO
E. Chicago, Ind., U. S.	United States Smelting, Refining & Mining Company	*U S S CO ELECTRO
Norfolk, Va., U. S.	Virginia Lead Smelting Corp., The	†aVIRGINIA
Staten Island, N. Y., U. S. A.	Nassau Smelting & Refining Co.	Nassau Blue
Newark, N. J., U. S. A.	Hudson Smelting & Refining Co.	Hudson
Philadelphia, Pa., U. S. A.	Bess & Co., Inc.	Schuykill

\*Deliverable against Commodity Exchange, Inc., Lead Contracts without Certificate of Assay.

\*\*Subsidiary of the American Metal Co., Ltd.

†Deliverable against Commodity Exchange, Inc., Lead Contracts with Certificate of Assay of one of the Official Assayers of the Exchange.

Subsidiary of National Lead Co.



# Copper Statistics Reported by Copper Institute

## Combined Totals in U. S. A. and Outside U. S. A.

		(In tons of 2,000 pounds)						
		Crude Production		Refined	Deliveries to Refined Stock		Stock Increases or Decreases	
		Primary	Secondary	Production	Customers	End of Period	Blister	Refined
1955	Total	2,613,662	133,065	2,728,309	2,744,391	221,331	+18,418	- 8,552
1956								+11,112
Aug.	.....	241,295	10,005	242,814	224,546	315,572	+ 8,486	+12,347
Sept.	.....	221,401	8,126	217,522	219,479	309,351	+12,005	- 6,221
Oct.	.....	255,442	13,924	263,752	234,080	333,952	+ 5,614	+24,001
Nov.	.....	249,360	10,204	254,377	239,181	345,181	+ 5,187	+11,229
Dec.	.....	236,512	13,124	250,173	237,003	354,420	- 537	+ 9,239
Total	.....	2,862,839	152,536	2,987,060	2,830,407	354,420	+28,415	+133,089
1957								+161,402
Jan.	.....	240,790	15,514	256,729	263,014	344,972	- 245	- 9,448
Feb.	.....	235,679	10,577	242,952	214,796	370,128	+ 3,304	+25,156
Mar.	.....	244,407	11,850	264,649	263,271	369,256	- 8,392	- 872
Apr.	.....	234,909	12,369	252,857	253,295	363,463	- 5,579	- 5,793
May	.....	249,564	10,456	275,323	256,379	376,761	-15,303	+13,298
June	.....	252,249	9,671	251,802	220,052	402,294	+10,119	+23,533
July	.....	224,304	7,403	239,365	224,035	430,301	- 7,658	+30,007
Aug.	.....	226,682	7,697	232,169	231,871	424,419	+ 4,210	- 5,882

### In U. S. A.

1955	Total	1,036,702	124,760	1,467,448	1,446,354	61,554	.....	+14,446
1956								.....
Aug.	.....	91,282	9,545	122,108	109,618	96,450	.....	+ 8,506
Sept.	.....	88,659	7,367	112,484	104,486	93,202	.....	- 3,248
Oct.	.....	95,109	12,621	136,379	113,353	106,120	.....	+12,918
Nov.	.....	90,573	8,940	122,970	114,524	116,515	.....	+10,393
Dec.	.....	92,231	12,352	129,839	99,594	120,645	.....	+ 4,129
Total	.....	1,133,134	139,584	1,580,287	1,465,899	120,645	.....	+50,091
1957								.....
Jan.	.....	94,783	14,683	139,150	119,925	118,564	.....	- 2,081
Feb.	.....	92,508	8,941	134,291	101,565	136,502	.....	+17,938
Mar.	.....	96,363	10,355	143,961	113,571	140,191	.....	+ 3,689
Apr.	.....	98,910	11,160	144,013	116,716	139,842	.....	- 349
May	.....	96,334	9,618	151,045	120,336	155,365	.....	+15,523
June	.....	95,893	8,792	134,270	101,993	165,549	.....	+10,184
July	.....	86,141	6,386	127,434	84,702	191,515	.....	+25,966
Aug.	.....	89,312	8,978	128,480	107,522	192,931	.....	+ 1,416

### Outside U. S. A.\*

1955	Total	1,576,960	8,305	1,260,861	1,298,037	159,777	.....	-21,752
1956								.....
July	.....	148,395	787	115,232	101,102	215,281	.....	+ 9,731
Aug.	.....	150,013	460	120,706	114,928	219,122	.....	+ 3,841
Sept.	.....	132,742	759	105,038	114,993	216,149	.....	- 2,972
Oct.	.....	160,333	1,303	127,373	120,727	227,832	.....	+11,683
Nov.	.....	158,787	1,264	121,407	124,657	228,665	.....	+ 833
Dec.	.....	144,281	772	120,334	137,409	233,775	.....	+ 5,110
Total	.....	1,729,705	12,952	1,406,773	1,364,508	233,775	.....	+73,998
1957								.....
Jan.	.....	146,097	831	117,579	143,089	226,408	.....	- 7,367
Feb.	.....	143,171	1,636	108,661	113,231	233,626	.....	+ 7,218
Mar.	.....	148,044	1,495	120,688	149,700	229,065	.....	- 4,561
Apr.	.....	135,999	1,209	108,844	136,579	223,621	.....	- 5,444
May	.....	153,230	838	124,278	136,043	221,396	.....	- 2,220
June	.....	156,356	879	117,531	118,059	234,745	.....	+13,349
July	.....	138,163	1,017	111,931	119,333	238,786	.....	+ 4,041
Aug.	.....	137,370	719	103,689	124,349	231,488	.....	- 7,298

\* Excluding Russia, Yugoslavia, Norway, Sweden, Japan and Australia.

### Electrolytic Copper

Producers' Price, Del. Valley  
Monthly Average Prices  
(Cents Per Pound)

	1954	1955	1956	1957
Jan.	29.88	30.24	43.00	36.00
Feb.	29.88	33.00	44.03	33.318
Mar.	29.93	33.222	46.00	32.00
Apr.	29.98	36.00	46.00	32.00
May	30.00	36.00	46.00	32.00
June	30.00	36.00	46.00	30.955
July	30.00	36.00	41.56	29.25
Aug.	30.00	37.81	40.00	28.639
Sept.	30.00	43.00	40.00	.....
Oct.	30.00	43.00	39.308	.....
Nov.	30.00	43.00	36.00	.....
Dec.	30.00	43.00	36.00	.....
Ave.	29.27	37.522	41.992	.....

### Electrolytic Copper

Custom Smelters' Price, Del. Valley  
Monthly Average Prices  
(Cents Per Pound)

	1954	1955	1956	1957
Jan.	29.75	30.48	50.22	34.87
Feb.	29.75	33.00	52.07	32.273
Mar.	29.866	33.667	53.11	30.952
Apr.	29.965	36.00	48.88	31.24
May	30.00	36.00	44.221	30.163
June	30.00	36.00	40.00	29.60
July	30.00	36.00	38.14	28.39
Aug.	30.00	40.14	39.32	27.862
Sept.	30.00	50.00	39.00	.....
Oct.	30.00	45.99	37.192	.....
Nov.	30.00	45.84	35.96	.....
Dec.	30.00	49.42	35.45	.....
Aver.	29.944	39.38	42.797	.....

### Lake Copper

Producers' Price Delivered  
Monthly Average Prices  
(Cents Per Pound)

	1954	1955	1956	1957
Jan.	30.00	30.12	43.00	36.00
Feb.	30.00	33.00	43.783	33.182
Mar.	30.00	33.56	46.00	32.00
Apr.	30.00	36.00	46.00	32.00
May	30.00	36.00	46.00	32.00
June	30.00	36.00	46.00	30.90
July	30.00	36.00	41.68	29.25
Aug.	30.00	37.46	40.00	28.611
Sept.	30.00	43.00	40.00	.....
Oct.	30.00	43.00	39.321	.....
Nov.	30.00	43.00	36.00	.....
Dec.	30.00	43.00	36.00	.....
Aver.	30.00	37.51	41.975	.....

## Fabricators' Copper Statistics

(In tons of 2,000 pounds)

	Fabricators' Stocks of Refined Cop.	Unfilled Purchase of Refined by Fab. from Producers	Fabricators' Working Stocks	Unfilled Sales by Fabricators to Customers	Actual Copper Consumed by Fabricators	Excess Fabricators' Stocks Over Orders Bkd.
1951						
Total	280,402	32,147	295,385	303,050	1,392,111	-285,886
1952						
Total	333,455	32,652	292,157	275,312	1,389,451	-201,362
1953						
Total	380,881	25,022	309,664	170,917	1,375,869	-74,678
1954						
Total	.....	.....	.....	.....	1,232,090	.....
1955						
Jan.	311,235	85,859	301,937	187,827	143,544	-92,670
Apr.	316,575	88,992	304,117	206,308	115,073	-103,858
May	327,343	111,715	309,219	323,279	113,485	-102,440
June	327,696	126,703	309,972	234,578	132,377	-90,151
July	312,587	165,605	301,048	286,095	75,846	-109,051
Aug.	304,097	150,854	303,089	283,653	97,688	-131,791
Sept.	334,996	133,391	314,111	270,102	113,628	-115,826
Oct.	353,469	135,075	313,048	275,255	115,453	-99,752
Nov.	373,314	139,855	313,779	283,953	122,332	-84,563
Dec.	389,974	139,094	314,145	293,264	127,006	-78,341
Total	.....	.....	.....	.....	1,412,287	.....
1956						
Jan.	376,753	143,815	312,128	305,942	138,711	-97,502
Feb.	388,823	135,637	319,279	282,314	130,923	-77,133
Mar.	392,143	140,348	319,056	291,465	135,746	-78,030
Apr.	413,979	135,071	319,247	266,239	118,839	-36,436
May	435,083	131,023	318,592	249,352	122,253	-1,838
June	451,126	114,223	324,970	227,097	113,835	+13,282
July	465,015	109,040	334,584	220,810	81,275	+18,661
Aug.	457,679	115,295	338,818	221,975	117,937	+12,181
Sept.	445,679	114,981	338,488	204,154	115,867	+18,018
Oct.	440,706	112,893	336,856	198,517	119,440	+18,226
Nov.	435,216	110,792	335,829	178,814	119,441	+31,365
Dec.	437,187	117,601	336,217	183,834	99,223	+34,737
Total	.....	.....	.....	.....	1,416,278	.....
1957						
Jan.	435,635	107,231	335,944	178,326	119,517	+28,596
Feb.	422,266	110,174	334,542	178,913	114,298	+18,985
Mar.	429,410	104,551	338,454	164,623	106,170	+30,884
Apr.	429,708	98,638	335,921	164,410	117,041	+28,015
May	434,852	92,943	336,697	170,476	115,355	+20,622
June	426,905	82,919	340,743	153,042	110,527	+16,039
July	432,918	85,728	341,684	144,410	77,991	+32,552

## Scrap Copper Receipts by Custom Smelters and Refineries in United States\*

	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Jan.	10,172	17,084	15,763	6,640	4,528	6,436	9,859	11,047	14,322	17,506
Feb.	11,890	20,238	12,500	5,153	3,633	10,337	8,490	15,198	14,497	11,145
Mar.	11,954	20,678	13,538	7,912	5,243	19,991	9,738	12,193	15,921	13,934
Apr.	15,125	15,968	12,304	8,553	6,214	16,583	9,004	13,162	17,233	14,288
May	16,357	14,237	8,749	8,458	8,033	10,857	8,687	15,133	20,805	12,397
June	11,178	8,809	20,523	8,628	4,425	10,945	13,399	14,765	14,758	11,949
July	8,370	7,782	10,040	6,642	5,188	9,063	10,760	9,988	12,632	8,926
Aug.	17,081	8,246	14,552	6,113	5,003	7,137	10,100	12,197	12,510	11,645
Sept.	16,001	10,890	4,903	3,561	4,667	9,042	10,641	15,037	9,518	.....
Oct.	10,854	6,401	9,459	3,336	4,602	10,065	11,662	12,897	15,570	.....
Nov.	7,625	15,347	9,237	3,179	4,724	7,815	10,879	9,865	11,369	.....
Dec.	11,826	10,533	7,178	4,538	6,208	11,476	14,876	13,180	14,613	.....
Total	147,931	156,303	142,067	71,812	62,470	129,798	127,449	154,714	173,748	.....

\* As compiled by Copper Institute.

## Brass and Bronze Ingot Monthly Shipments

(Net Tons)

The following figures showing the combined shipments of ingot brass and bronze are compiled by the Ingot Brass and Bronze Industry and represent in excess of 95 per cent of the deliveries of the entire industry.

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Jan.	27,841	26,998	19,456	18,874	28,415	28,315	24,423	20,661	25,201	27,736	25,681
Feb.	24,686	22,487	15,026	18,487	27,168	24,211	25,429	19,920	25,349	24,949	20,769
Mar.	17,477	24,282	14,550	22,494	31,397	23,890	28,226	23,653	29,713	28,310	21,948
Apr.	24,577	25,177	10,695	22,118	30,472	22,547	25,044	24,746	27,641	25,808	23,507
May	19,526	23,716	11,114	23,643	33,267	21,740	21,660	22,269	23,708	23,437	22,037
June	16,929	24,401	9,696	25,093	33,817	21,274	20,818	22,348	23,141	18,842	18,888
July	16,728	20,456	10,220	21,609	32,016	18,947	19,321	17,074	18,513	17,364	16,695
Aug.	18,589	24,098	14,194	26,689	25,285	21,807	20,156	21,684	27,018	23,812	.....
Sept.	19,025	23,641	16,208	28,811	22,285	22,770	21,463	22,464	26,349	20,929	.....
Oct.	22,804	21,559	18,026	32,240	23,124	25,811	22,280	24,080	25,228	23,045	.....
Nov.	21,668	21,731	18,488	31,748	23,544	23,441	21,860	23,061	25,102	21,818	.....
Dec.	23,863	20,954	17,960	28,575	20,367	22,983	20,541	21,274	21,448	18,046	.....
Total	263,711	279,506	175,643	303,563	332,378	277,736	271,251	263,233	298,406	274,096	.....
Aver	21,976	23,292	14,637	25,297	27,615	23,145	22,604	21,936	24,867	22,841	.....

METALS, SEPTEMBER, 1957

## Mine Production of Copper in United States

(U. S. Bureau of Mines)

(In short tons)

	Eastern	Missouri	Western	Total
1953				
Ttl.	38,900	2,374	885,174	926,448
1954				
Ttl.	40,302	1,925	793,241	835,472
1955				
Ttl.	68,622	2,140	921,838	992,600
1956				
Jan.	6,674	163	88,277	95,114
Feb.	6,888	164	82,519	89,371
Mar.	7,347	198	90,599	98,104
Apr.	6,821	195	88,592	95,608
May	6,960	191	92,531	99,682
June	6,720	173	88,049	94,942
July	6,132	185	74,283	80,600
Aug.	6,638	219	85,224	92,067
Sept.	6,195	163	78,934	85,292
Oct.	6,405	183	87,102	93,690
Nov.	6,498	150	81,984	88,632
Dec.	6,603	150	80,452	87,205
Ttl.	79,681	2,130	1,018,496	1,100,307
1957				
Jan.	6,607	172	86,431	93,210
Feb.	6,082	163	84,011	90,256
Mar.	6,714	196	88,257	95,167
Apr.	6,579	237	86,627	94,443
May	7,198	200	85,460	92,858

## Average Custom Smelters' Scrap Buying Prices

(Cents per pound for carload lots del. consumers' works)

	No. 1 Copper Scrap	No. 2 Copper Scrap	Light Copper Scrap	Refinery Brass
1955				
Av.	37.035	35.535	33.59	32.70
1956				
June	33.32	31.82	29.32	29.03
July	32.69	31.19	28.69	28.98
Aug.	34.269	32.769	30.269	30.75
Sept.	33.56	32.06	29.81	29.92
Oct.	30.964	29.464	27.214	27.44
Nov.	30.51	29.01	26.76	27.50
Dec.	30.423	28.923	26.673	27.42
Av.	36.25	34.75	32.33	32.47
1957				
Jan.	29.30	27.80	25.55	26.30
Feb.	26.47	24.97	22.72	23.75
Mar.	26.58	25.08	22.83	24.52
Apr.	26.895	25.395	23.145	24.695
May	25.985	24.485	22.235	23.735
June	25.353	23.853	21.603	23.35
July	24.21	22.71	20.46	22.03
Aug.	23.26	21.76	19.51	21.29

\*Of dry content for material having a dry copper content in excess of 60%.

## Brass Ingot Makers' Scrap Copper Buying Prices

(Average Prices)  
(Cents per pound del. refinery for 60,000 lbs. of each grade)

	No. 1 Copper Scrap	No. 2 Copper Scrap	No. 1 Composition	Heavy Yellow Brass
1955				
Av.	36.63	35.02	29.905	22.35
1956				
June	33.32	31.82	26.37	18.40
July	32.69	31.19	26.89	18.43
Aug.	34.269	32.769	29.833	20.463
Sept.	33.26	32.25	30.07	20.92
Oct.	30.687	29.187	28.058	19.538
Nov.	30.39	28.89	26.69	18.91
Dec.	30.195	28.695	27.50	18.96
Av.	36.17	34.67	30.483	21.34
1957				
Jan.	29.27	27.77	26.59	18.55
Feb.	26.47	24.97	23.50	16.65
Mar.	26.58	25.08	22.83	17.40
Apr.	26.895	25.395	23.50	17.50
May	25.985	24.485	23.144	17.144
June	25.353	23.853	22.83	16.65
July	24.21	22.71	22.01	15.71
Aug.	23.26	21.76	21.56	15.63

## United States Lead Statistics of Primary Refineries

(American Bureau of Metal Statistics)  
(In tons of 2,000 lbs.)

	Stock At Beginning	Production Primary & Secondary	Total Supply	Stock At End	Domestic Shipments
1953 .....	43,560	533,883	577,443	81,152	488,437
1954 .....	81,152	551,618	632,770	92,719	475,551
1955 .....					
October .....	30,753	53,747	84,500	29,913	52,062
November .....	29,913	52,623	82,536	28,855	51,370
December .....	28,855	50,448	79,303	31,089	48,171
Total .....		547,153	639,872	.....	531,339
1956 .....					
January .....	31,089	51,306	82,395	32,469	49,746
February .....	32,469	49,475	81,944	41,450	39,411
March .....	41,450	54,174	95,624	52,089	39,344
April .....	53,089	52,976	105,065	53,958	44,986
May .....	53,958	47,961	101,919	50,460	40,703
June .....	50,460	47,367	97,827	45,951	41,458
July .....	45,951	48,479	94,430	49,134	36,483
August .....	49,134	48,404	97,538	39,304	48,404
September .....	39,304	53,530	92,834	40,542	47,519
October .....	40,542	54,815	95,357	42,314	45,254
November .....	42,314	50,744	93,058	37,192	47,349
December .....	37,192	54,063	91,254	41,181	44,191
Total .....		613,293	644,382	.....	529,484
1957 .....					
January .....	41,181	50,854	92,035	42,905	40,549
February .....	42,905	48,102	90,917	48,699	37,517
March .....	48,699	52,357	101,056	46,184	38,225
April .....	46,184	56,170	102,354	57,444	37,583
May .....	57,444	51,718	109,162	58,085	35,334
June .....	58,085	48,203	106,288	64,861	37,257
July .....	64,861	47,100	111,961	68,009	38,582

In instances where the figures are not in balance it is due to shipments to other than domestic consumers.

## Industrial Classification of Domestic Lead Shipments

(American Bureau of Metal Statistics)

(In tons of 2,000 lbs.)

	Cable	Amm.	Foil	Batt'y	Brass Making	Sun- dries	Job- bers	Unclassi- fied
1952	74,616	30,809	1,374	77,238	5,160	50,943	5,671	246,283
1953	76,283	34,415	2,136	80,389	5,716	55,936	6,390	227,222
1954	75,412	30,246	2,811	66,088	5,192	57,369	9,170	229,264
1955 .....								
Jan.	7,044	1,570	36	5,158	218	4,451	857	21,122
Feb.	5,869	3,200	348	6,758	289	4,796	1,013	24,373
Mar.	6,538	2,340	614	6,897	240	3,807	1,167	20,778
Apr.	5,909	2,625	201	6,533	463	5,178	1,234	22,735
May	6,145	2,950	251	8,127	321	4,435	1,145	22,756
June	6,623	950	50	6,833	290	5,175	1,293	23,816
July	2,313	150	307	4,365	100	3,763	946	14,603
Aug.	5,772	2,800	210	4,794	290	3,741	1,230	22,632
Sept.	6,552	2,295	415	7,794	354	4,711	1,149	22,980
Oct.	6,772	3,026	85	9,819	564	4,899	1,287	25,610
Nov.	6,606	2,433	70	13,875	387	3,795	874	23,330
Dec.	6,275	3,260	35	7,508	449	4,289	839	25,516
Total	72,418	27,599	2,622	88,461	3,960	52,994	13,034	270,251
1956 .....								
Jan.	7,777	3,075	200	6,555	290	8,538	917	22,394
Feb.	5,974	2,435	384	5,983	275	3,592	871	19,897
Mar.	6,786	1,300	101	4,903	321	3,915	1,331	20,687
Apr.	6,744	2,950	310	4,839	260	3,522	1,376	24,986
May	6,490	2,825	...	5,027	131	3,513	964	21,753
June	8,502	2,150	...	4,167	186	3,645	1,021	21,787
July	3,497	904	...	5,007	80	2,859	1,453	22,683
Aug.	7,712	1,497	85	6,334	713	4,443	1,262	26,358
Sept.	6,354	1,850	135	6,303	230	5,038	1,339	26,270
Oct.	7,988	1,715	135	7,108	286	4,955	1,493	21,574
Nov.	6,096	2,351	...	8,556	226	5,573	792	23,755
Dec.	6,440	1,449	85	5,832	160	7,258	394	22,573
Total	80,360	24,501	1,435	70,614	3,158	56,851	13,213	274,716
1957 .....								
Jan.	5,297	2,800	200	6,886	671	4,002	1,191	19,502
Feb.	5,103	1,450	350	6,549	508	4,820	625	18,112
Mar.	5,956	752	...	6,479	686	4,614	1,064	18,674
April	6,731	2,250	...	6,242	909	2,958	1,040	17,453
May	6,976	2,200	120	4,705	270	3,871	634	16,558
June	3,726	2,250	75	3,762	666	5,071	1,087	20,620
July	5,249	1,650	105	5,332	566	5,310	1,110	19,260

## Lead Prices at New York

(Common Grade)

Monthly Average Prices  
(Cents per pound)

	1954	1955	1956	1957
Jan.	13.26	15.00	16.16	16.00
Feb.	12.82	15.00	16.00	16.00
Mar.	12.94	15.00	16.00	16.00
Apr.	13.91	15.00	16.00	16.00
May	14.00	15.00	16.00	15.385
June	14.11	15.00	16.00	14.32
July	14.00	15.00	16.00	14.00
Aug.	14.06	15.00	16.00	14.00
Sept.	14.60	15.12	16.00	....
Oct.	14.975	15.50	16.00	....
Nov.	15.00	15.50	16.00	....
Dec.	15.00	15.56	16.00	....
Av.	14.06	15.14	16.013	....

## Lead Sheet Prices

(To Jobbers, Full Sheets)

Monthly Average Prices  
(Cents per pound)

	1954	1955	1956	1957
Jan.	18.26	20.00	21.66	21.50
Feb.	17.82	20.00	21.50	21.50
Mar.	17.94	20.00	21.50	21.50
Apr.	18.91	20.00	21.50	21.50
May	19.00	20.00	21.50	20.885
June	19.11	20.00	21.50	19.82
July	19.00	20.00	21.50	19.50
Aug.	19.06	20.00	21.50	19.50
Sept.	19.60	20.12	21.50	....
Oct.	19.975	20.50	21.50	....
Nov.	20.00	20.50	21.50	....
Dec.	20.00	20.56	21.50	....

## Battery Shipments

The following table shows replacement battery shipments in the United States as compiled by the Business Information Division of Dun & Bradstreet, Inc., for the Association of American Battery Manufacturers:

(In thousands of units)

	1954	1955	1956	1957
Jan.	1,836	1,518	2,058	2,638
Feb.	1,461	1,691	1,340	1,960
Mar.	1,226	1,356	1,348	1,254
Apr.	1,180	1,315	1,368	1,178
May	1,429	1,614	1,761	1,604
June	1,883	1,842	1,807	1,878
July	2,350	2,078	2,178	2,477
Aug.	2,548	2,852	2,571	....
Sept.	2,800	3,120	2,711	....
Oct.	2,739	3,120	3,015	....
Nov.	2,475	2,697	2,592	....
Dec.	1,844	2,625	2,265	....
Total	23,771	25,828	25,014	....

METALS, SEPTEMBER, 1957



# Lead Stocks at Primary U. S. Smelters and Refiners

(American Bureau of Metal Statistics)  
(In tons of 2,000 lbs.)

	In ore and matte and in process at smelters	At smelters & refineries	In transit to refineries	In process at refineries	Refined pig lead	Anti- monial lead	Total Stocks
1955							
July 1	58,182	14,707	2,941	30,579	34,432	10,233	151,074
Aug. 1	65,476	10,065	1,303	26,792	30,077	9,779	143,492
Sept. 1	75,057	17,183	3,744	29,660	26,859	7,252	159,755
Oct. 1	70,628	19,083	4,217	28,424	23,292	7,461	153,105
Nov. 1	71,257	20,682	4,276	28,596	21,828	8,085	154,724
Dec. 1	64,109	20,232	4,377	27,486	19,592	9,263	145,059
1956							
Jan. 1	71,812	16,532	3,764	27,625	21,196	9,893	150,822
Feb. 1	70,690	19,082	1,764	25,632	24,080	8,389	149,637
Mar. 1	71,023	16,406	2,583	27,519	32,355	9,095	158,981
Apr. 1	72,358	16,655	2,152	28,065	41,800	10,289	170,319
May 1	74,837	15,500	2,718	24,181	43,268	10,690	171,194
June 1	78,987	15,477	2,475	26,682	39,558	10,902	174,081
July 1	81,796	15,837	4,423	28,505	36,499	9,452	176,512
Aug. 1	76,985	16,856	3,516	29,603	33,210	10,924	176,094
Sept. 1	81,634	18,529	2,874	29,991	29,230	10,074	172,332
Oct. 1	77,787	15,991	4,413	28,083	29,361	11,181	166,816
Nov. 1	78,253	12,022	3,083	25,783	30,932	11,382	161,485
Dec. 1	82,197	9,095	4,132	25,627	25,360	11,832	158,243
1957							
Jan. 1	77,918	12,222	2,846	25,092	29,435	11,746	159,249
Feb. 1	80,451	10,636	4,061	25,827	32,418	10,487	163,880
Mar. 1	81,274	11,880	4,394	25,728	38,479	10,220	171,975
Apr. 1	82,461	14,598	3,593	25,401	36,390	9,794	172,237
May 1	81,061	17,035	2,705	20,890	48,053	9,391	179,135
June 1	81,364	11,585	3,071	21,002	48,286	9,799	175,107
July 1	82,730	12,036	3,560	22,380	55,358	9,503	185,567
Aug. 1	97,111	11,479	2,532	22,917	59,348	8,661	202,048

## Receipts of Lead in Ore and Scrap

By U. S. Smelters (a)

(American Bureau of Metal Statistics)

(In tons of 2,000 lbs.)

	Receipts of lead in ore			Receipts of lead in scrap etc. (b)	Total receipts in ore, & scrap
	United States	Foreign	Total		
1952 Total	405,990	98,276	504,266	41,845	546,111
1953 Total	351,183	155,788	506,971	42,994	549,965
1954 Total	336,291	158,081	494,372	49,864	544,236
1955					
July	23,027	3,826	26,853	649	27,502
August	30,249	11,859	42,108	3,942	46,050
September	29,377	14,881	44,258	3,623	47,881
October	30,073	20,845	50,918	5,655	56,573
November	27,736	13,022	40,758	3,802	44,560
December	29,363	24,136	53,499	3,150	56,649
Total	341,595	172,966	514,561	42,996	557,557
1956					
January	27,184	15,704	42,888	6,346	49,234
February	28,569	16,528	45,097	4,577	49,674
March	31,568	17,904	49,472	3,989	53,461
April	31,786	15,224	47,010	4,252	51,262
May	32,715	18,476	51,191	4,711	55,902
June	31,546	16,251	47,797	4,541	52,338
July	29,964	13,476	43,440	3,207	46,647
August	31,112	20,726	51,838	5,885	57,723
September	28,731	16,276	45,007	3,351	48,358
October	33,614	12,350	45,964	5,439	51,403
November	30,553	14,308	44,861	5,141	50,002
December	31,154	15,095	46,252	4,536	50,788
Total	368,499	192,318	560,817	55,925	616,792
1957					
January	30,632	19,961	50,593	4,471	55,064
February	31,410	15,059	46,469	4,564	51,033
March	33,445	18,813	52,258	3,058	55,316
April	31,343	13,042	44,385	2,848	47,233
May	32,138	12,324	44,462	3,431	47,893
June	29,896	19,592	49,488	2,272	51,760
July	29,585	17,936	47,521	2,893	50,414

(a) Receipts of lead in ore are computed on the basis of recoverable lead. Owing to the estimational factor in this, which is probably on the low side, and also to the possibility that some lead receipts may escape attention, these monthly totals probably understate the actual production of pig lead. (b) Inclusive only of scrap smelted in connection with ore, plus some scrap received by primary refineries.

METALS, SEPTEMBER, 1957

## N. Y. Lead Price Changes (Effective Date)

1949	Feb. 2....13.50
Nov. 16....12.50	Mar. 4....13.00
Nov. 21....12.00	Mar. 10....13.50
1950	Apr. 7....13.00
Mar. 9....11.00	Apr. 16....12.50
Mar. 14....10.50	Apr. 21....12.00
Apr. 20....10.75	Apr. 29....12.50
Apr. 26....11.00	May 18....12.75
May 4....11.25	May 19....13.00
May 10....11.50	May 26....13.15
May 11....12.00	June 11....13.50
June 23....11.50	July 20....13.75
1951	July 23....14.00
June 28....11.00	Sept. 16....13.50
July 12....11.50	1954
July 13....12.00	Jan. 18....13.00
Aug. 15....13.00	Feb. 18....12.50
Aug. 21....14.00	Mar. 9....12.75
Sept. 1....15.00	Mar. 10....13.00
Sept. 8....16.00	Mar. 26....13.25
Oct. 2...19.00	Mar. 29....13.50
Oct. 31....17.00	Apr. 1....13.75
1952	Apr. 12....14.00
Apr. 29....18.00	June 2....14.25
May 2....17.00	June 15....14.00
May 12....15.00	Aug. 25....14.25
June 23....15.50	Sept. 7....14.60
June 24....16.00	Sept. 15....14.75
Oct. 7....15.00	Oct. 4....14.875
Oct. 14....14.00	Oct. 5....15.00
Oct. 22....13.50	1955
Nov. 3....14.00	Oct. 23....15.00
Nov. 10....14.25	15.50
Nov. 11....14.50	Oct. 26....15.50
Nov. 20....14.25	Dec. 29....16.00
Nov. 24....14.00	1956
Dec. 22....14.25	Jan. 4....16.50
Dec. 29....14.50	Jan. 13....16.00
Dec. 31....14.75	1957
1953	May 9....15.50
Jan. 7....14.50	May 16....15.00
Jan. 12....14.00	June 11....14.00

\*\*OPS Ceiling.

## Antimonial Lead Stocks at Primary Refineries (A.B.M.S.)

	(In tons of 2,000 lbs.)			
End of:	1954	1955	1956	1957
Jan. ..	14,691	14,902	8,389	10,487
Feb. ..	14,798	12,204	9,095	10,220
Mar. ..	11,985	12,385	10,289	9,794
Apr. ..	11,977	11,740	10,690	9,391
May ..	11,882	11,055	10,902	8,799
June ..	9,798	10,233	9,452	9,503
July ..	12,210	9,779	10,924	8,661
Aug. ..	12,279	7,252	10,074	....
Sept. ..	14,168	7,461	11,181	....
Oct. ..	14,846	8,685	11,382	....
Nov. ..	14,573	9,263	11,832	....
Dec. ..	14,789	9,893	11,746	....

## Antimonial Lead Production by Primary Refineries (A.B.M.S.)

	(In tons of 2,000 lbs.)			
End of:	1954	1955	1956	1957
Jan. ..	3,768	4,529	5,045	5,113
Feb. ..	4,257	4,777	5,888	5,468
Mar. ..	4,475	6,202	5,526	5,091
Apr. ..	4,470	5,343	5,818	6,183
May ..	4,373	4,737	5,405	6,978
June ..	3,796	4,792	4,456	4,566
July ..	5,991	1,153	3,853	5,372
Aug. ..	6,455	2,946	5,343	....
Sept. ..	5,869	6,650	6,709	....
Oct. ..	5,532	8,016	5,378	....
Nov. ..	5,364	7,985	6,993	....
Dec. ..	5,255	6,907	5,766	....

Total 59,875 64,037 66,180 ....

## U. S. Lead Consumption

(Bureau of Mines — In Short Tons)

Metal Products	1957		
	Jan.-June	May	June
Ammunition .....	22,362	4,626	3,697
Bearing metals .....	12,300	1,877	1,927
Brass and bronze .....	12,214	1,955	1,865
Cable covering .....	63,821	10,273	9,935
Calking lead .....	31,944	5,315	6,718
Casting metals .....	6,462	1,279	999
Collapsible tubes .....	4,663	719	843
Foil .....	2,296	410	246
Pipes, traps, bends .....	11,525	1,951	1,806
Sheet lead .....	13,015	1,908	2,339
Solder .....	35,572	5,438	5,978
Storage battery grids, posts, etc. ....	90,097	15,862	11,904
Storage battery oxides .....	88,383	13,371	12,138
Terne metal .....	647	98	116
Type metal .....	12,714	1,995	2,062
<b>Total</b> .....	<b>408,015</b>	<b>67,077</b>	<b>62,573</b>
<b>Pigments:</b>			
White lead .....	7,850	1,381	1,622
Red lead & litharge .....	40,905	6,678	6,945
Pigment colors .....	6,241	1,117	1,115
Other* .....	2,830	420	348
<b>Total</b> .....	<b>57,826</b>	<b>9,596</b>	<b>10,030</b>
<b>Chemicals:</b>			
Tetraethyl lead .....	84,654	13,805	14,530
Misc. chemicals .....	1,898	163	183
<b>Total</b> .....	<b>86,552</b>	<b>13,968</b>	<b>14,713</b>
<b>Miscellaneous uses:</b>			
Annealing .....	2,483	381	405
Galvanizing .....	639	87	53
Lead plating .....	188	30	53
Weights & ballast .....	2,780	449	556
<b>Total</b> .....	<b>6,045</b>	<b>947</b>	<b>1,067</b>
Other uses unclassified .....	8,438	1,403	1,411
<b>Total reported</b> .....	<b>†566,876</b>	<b>†92,991</b>	<b>†89,794</b>
Estimated unreported consumption .....	6,000	1,000	1,090
<b>Grand total</b> .....	<b>†572,900</b>	<b>†94,000</b>	<b>†90,800</b>
<b>Daily average†</b> .....	<b>3,165</b>	<b>3,032</b>	<b>3,026</b>

\* Includes lead content of leaded zinc oxide production.

† Includes lead content of scrap used directly in fabricated products.

† Based on number of days in month without adjustment for Sundays or holidays.

## Consumers' Lead Stocks, Receipts and Consumption

(Bureau of Mines — In Short Tons)

	Stocks May 31, 1957	Net Receipts in June	Consumed in June	Stocks June 30, 1957
Soft lead .....	61,327	54,315	58,579	57,063
Antimonial lead .....	35,118	19,447	22,180	32,385
Lead in alloys .....	8,267	3,879	3,969	8,177
Lead in copper-base scrap ..	2,016	1,443	1,432	2,027
<b>Total</b> .....	<b>106,728</b>	<b>79,084</b>	<b>*86,160</b>	<b>99,652</b>

\* Excludes 3,302 tons of lead which went directly from scrap to fabricated products and 332 tons of lead contained in leaded zinc oxide production.

## Consumption of Lead by Class of Product

(Bureau of Mines — In Short Tons)

	JUNE			
	Soft lead	Antimonial lead	Lead in alloys	Lead in Copper-base scrap
Metal products .....	32,297	21,687	3,928	1,432
Pigments .....	9,683	15	....	....
Chemical .....	14,712	1	....	....
Miscellaneous .....	664	403	....	....
Unclassified .....	1,223	74	41	....
<b>Total</b> .....	<b>58,579</b>	<b>22,180</b>	<b>3,969</b>	<b>1,432</b>

\* Excludes 3,302 tons of lead which went directly from scrap to fabricated products and 332 tons of lead contained in leaded zinc oxide production.

## U. K. Lead Consumption

(British Bureau of Non-Ferrous Metal Statistics)

	(In tons of 2,240 pounds)		
	1955	1956	1957
Jan. ....	29,062	31,012	29,657
Feb. ....	28,926	30,125	29,219
Mar. ....	33,225	30,099	29,441
Apr. ....	28,656	28,186	27,246
May ....	31,092	29,752	31,574
June ....	32,627	31,501	28,607
July ....	26,994	26,963	27,604
Aug. ....	26,954	25,077	....
Sept. ....	34,291	30,274	....
Oct. ....	34,121	32,057	....
Nov. ....	34,820	32,036	....
Dec. ....	29,689	25,963	....
<b>Total</b> .....	<b>370,794</b>	<b>353,045</b>	<b>....</b>

## American Antimony

	Monthly Average Prices			
	In bulk, f.o.b. Laredo			
	(Cents per lb. in ton lots)			
	1954	1955	1956	1957
Jan. ....	28.50	28.50	33.00	33.00
Feb. ....	28.50	28.50	33.00	33.00
Mar. ....	28.50	28.50	33.00	33.00
Apr. ....	28.50	28.50	33.00	33.00
May ....	28.50	28.50	33.00	33.00
June ....	28.50	28.50	33.00	33.00
July ....	28.50	28.50	33.00	33.00
Aug. ....	28.50	30.66	33.00	33.00
Sept. ....	28.50	33.00	33.00	....
Oct. ....	28.50	33.00	33.00	....
Nov. ....	28.50	33.00	33.00	....
Dec. ....	28.50	33.00	33.00	....
<b>Aver.</b> .....	<b>28.50</b>	<b>30.18</b>	<b>33.00</b>	<b>....</b>

## Lead Imports and Exports By Principal Countries

(A. B. M. S.)

Reported in pigs, bars, etc.; metric tons except where otherwise noted.

	1957		
	Apr.	May	June
<b>IMPORTS</b>			
U. S.* (s.t.) ....	25,069	22,282	28,002
Denmark .....	813	467	1,607
France .....	4,139	4,165	5,615
Italy† .....	1,062	1,307	....
Netherlands ....	3,573	4,186	....
Norway .....	658	1,336	....
Sweden .....	581	1,772	....
Switzerland ....	1,048	1,044	1,070
U. K. (l.t.) ....	20,806	6,385	13,274
India‡ (l.t.) ....	1,683	420	....

	1957		
	Apr.	May	June
<b>EXPORTS</b>			
U. S.* (s.t.) ....	445	98	110
Canada (s.t.) ....	7,314	9,676	7,210
Denmark .....	123	206	349
France .....	272	26	501
Netherlands ....	697	796	....
Switzerland ....	20	....	....
<b>Northern</b>			
Rhodesia‡ (l.t.) ..	1,205	1,328	....
Australia‡ (l.t.) ..	10,915	13,152	....
Sweden .....	266	1,176	....

\* Refined.

† Includes lead alloys.

‡ British Bureau of Non-Ferrous Metal Statistics.

## French Lead Imports

	1957		
	May	June	July
<b>(In metric tons)</b>			
Ore (gross weight) .....	13,428	6,580	7,982
Italy .....	438	....	....
Morocco .....	12,990	6,580	6,982
Fr. Eq. Africa ..	....	....	1,000
Pig lead .....	4,165	5,615	1,263
Belgium .....	51	388	....
Germany (W.) ..	325	275	....
Spain .....	....	100	....
Algeria .....	2	2	21
Morocco .....	1,867	1,715	112
Tunisia .....	1,919	3,134	1,130
Other countries ..	1	1	....
Antimonial lead ..	503	17	4

## U. K. Lead Imports

	1957		
	May	June	July
<b>(Gross Weight)</b>			
Lead and lead alloys ....	6,385	13,274	16,608
Australia .....	2,698	5,766	12,260
Canada .....	1,775	5,930	3,250
Belgium .....	399	300	200
Yugoslavia ....	100	....	200
United States ..	....	250	251
Peru .....	799	150	100
Other countries ..	614	878	347

**METALS, SEPTEMBER, 1957**



## Domestic Zinc Statistics

American Zinc Institute

Commencing with January, 1948, all regularly operating U. S. primary and secondary smelters are included in this report. Production from foreign area also is included.

(Tons of 2,000 lbs.)

	Stock Begin- ning	Pro- duc- tion	Shipments				Stock at End	Unfilled Orders at End	Daily Avg. Prod.
			Domestic	Export & Drawback	Gov't Acct	Total			
1950	TL 94,281	910,354	849,246	18,189	123,256	990,691			
1950	Mo. Avg.	75,863	70,770	1,516	10,068	82,974			
1951	TL 8,884	931,833	836,800	32,067	39,949	918,816	21,901	50,509	2,553
1951	Mo. Avg.	77,653	69,733	3,506	3,329	76,568			
1952	TL 21,901	961,430	808,343	56,302	38,626	896,171	87,160	45,264	2,627
1952	Mo. Avg.	80,119	66,945	4,683	3,052	74,681			
1953	TL 180,843	971,191	818,850	16,326	42,382	877,558	180,843	35,466	2,661
1953	Mo. Avg.	80,933	68,238	1,361	3,528	73,126			
1954									
Total	124,277	868,242	787,922	27,929	108,957	924,808	124,077	45,862	....
Monthly Avg.		72,853	65,660	2,327	9,080	77,067	.....	.....	2,379
1955									
Jan.	63,184	84,458	92,212	1,492	5,335	99,039	48,503	57,281	2,815
Feb.	48,603	84,400	76,812	362	4,039	81,712	51,290	64,056	2,738
Mar.	51,290	84,874	87,042	886	2,153	90,080	46,084	73,632	2,738
Apr.	46,084	83,448	83,654	1,274	2,427	87,365	42,167	82,278	2,781
May	42,167	89,449	85,770	36	1,942	87,748	43,868	61,746	2,886
June	43,868	86,618	91,535	289	1,561	93,425	38,058	64,560	2,921
July	38,058	92,578	87,010	684	1,963	89,657	40,979	72,908	2,956
Aug.	40,979	1,031,018	1,007,619	19,496	87,200	1,114,316	40,979	72,908	....
Monthly Avg.		85,918	83,968	1,625	7,267	92,860			2,325
1956									
Jan.	40,979	90,313	87,723	1,084	1,155	89,962	41,330	60,717	2,918
Feb.	41,330	86,329	84,727	317	2,782	87,826	39,533	45,255	2,977
Mar.	39,533	91,690	84,204	460	6,621	91,485	40,038	53,070	2,958
Apr.	40,038	88,664	74,739	1,437	4,570	89,795	47,907	44,106	2,955
May	47,907	81,288	59,085	257	10,196	69,565	59,577	84,003	2,629
June	59,577	78,321	53,048	639	15,085	68,672	69,234	45,921	2,611
July	69,234	83,080	34,219	811	14,501	49,631	102,775	53,559	2,680
Aug.	102,775	89,549	70,707	1,235	16,076	88,017	104,307	55,769	2,889
Sept.	104,307	90,235	73,142	934	18,301	92,377	102,165	64,450	3,008
Oct.	102,165	93,493	84,991	465	21,392	106,848	88,810	53,425	3,016
Nov.	88,810	91,808	82,478	787	27,168	110,433	70,185	45,866	3,060
Dec.	70,185	98,234	80,772	671	18,354	99,797	68,622	34,913	3,169
Total		1,062,954	869,270	9,027	157,014	1,035,311			....
Monthly Avg.		88,550	72,439	752	13,085	86,275			2,904
1957									
Jan.	68,622	93,452	67,273	450	15,377	83,100	78,974	42,922	3,014
Feb.	78,974	88,078	67,441	1,527	10,905	80,163	86,889	56,421	3,146
Mar.	87,040	96,924	67,097	1,558	25,608	94,607	89,357	56,818	3,127
Apr.	89,357	96,506	55,000	1,411	23,931	89,332	105,531	42,102	3,217
May	105,531	96,855	60,729	2,106	26,858	89,683	112,693	31,539	3,174
June	112,693	90,719	54,275	1,358	14,324	68,957	133,455	28,822	3,024
July	133,455	85,744	58,239	4,497	10,310	73,046	146,153	28,296	2,767
Aug.	146,153	84,166	70,318	860	9,871	81,049	149,296	31,663	2,715

## U. S. Consumption of Slab Zinc

	Bureau of Mines					
	By Industries (Short Tons)					
	Galvan- izers	Die Casters	Brass products	Rolled zinc	Zinc oxide & other	Total
1949 Total	348,544	197,387	84,257	55,100	17,643	702,931
1950 Total	434,094	281,385	136,451	67,779	27,656	947,365
1951 Total	386,373	266,442	141,456	64,000	28,788	887,009
1952 Total	375,563	236,022	155,311	51,508	30,885	849,289
1953 Total	403,162	305,346	177,301	53,784	38,037	977,636
1954						
Total	398,599	286,817	107,293	45,979	33,342	876,130
1955						
June	37,874	32,821	13,305	5,012	3,227	92,239
July	33,433	23,910	7,017	2,832	2,897	70,589
August	38,317	30,168	10,244	5,431	3,027	87,687
September	39,181	31,804	12,672	4,185	3,507	91,849
October	40,030	35,136	13,961	4,714	3,596	97,940
November	38,116	38,616	13,455	3,952	3,636	98,275
December	37,249	36,982	15,003	3,900	3,621	96,755
Total	439,694	404,790	144,816	50,363	39,302	1,081,468
1956						
January	38,148	36,554	13,097	4,442	3,665	95,906
February	37,702	31,274	12,678	3,883	3,325	88,862
March	38,662	31,332	12,889	4,433	3,566	90,882
April	37,092	29,226	12,635	4,010	3,359	86,322
May	38,064	26,003	12,218	3,431	1,260	80,976
June	37,005	21,790	8,351	3,454	1,315	71,915
July	12,960	21,425	5,193	2,187	2,883	45,648
August	33,840	26,814	8,420	4,222	2,959	76,255
September	37,313	26,998	8,370	3,397	3,280	79,358
October	40,875	34,985	10,164	4,158	3,695	93,877
November	36,767	32,812	9,581	3,625	3,539	87,224
December	32,790	33,238	8,799	3,140	3,405	82,272
Total	421,218	352,451	122,395	45,382	36,251	988,097
1957						
January	34,337	37,517	10,800	3,502	3,434	90,490
February	31,686	32,520	9,156	3,284	3,206	80,752
March	30,747	30,946	8,860	3,553	3,378	78,384
April	30,631	29,166	9,491	4,001	3,300	77,489
May	30,537	28,423	9,563	3,389	3,097	75,909
June	29,907	27,688	8,710	3,613	2,646	73,464

METALS, SEPTEMBER, 1957

## Prime Western Zinc Prices

	(Cents per pound)			
	(In tons of 2,240 pounds)			
	1954	1955	1956	1957
Jan.	9.76	11.50	13.46	13.50
Feb.	9.375	11.50	13.50	13.50
Mar.	9.66	11.50	13.50	13.50
Apr.	10.25	11.93	13.50	13.50
May	10.29	12.00	13.50	11.933
June	10.96	12.25	13.50	10.84
July	11.00	12.50	13.50	10.00
Aug.	11.00	12.50	13.50	10.00
Sept.	11.44	12.96	13.50	....
Oct.	11.50	13.02	13.50	....
Nov.	11.50	13.00	13.50	....
Dec.	11.50	13.00	13.50	....
Av.	10.69	12.305	13.497	....

## High Grade Zinc Prices

	(Delivered)			
	N. Y. Monthly Averages			
	(Cents per pound)			
	1954	1955	1956	1957
Jan.	11.11	12.85	14.81	14.85
Feb.	10.725	12.85	14.85	14.85
Mar.	11.01	12.85	14.85	14.85
Apr.	11.60	13.28	14.85	14.85
May	11.64	13.35	14.85	13.283
June	12.31	13.60	14.85	12.19
July	12.35	13.85	14.85	11.35
Aug.	12.35	13.85	14.85	11.35
Sept.	12.79	14.31	14.85	....
Oct.	12.85	14.37	14.85	....
Nov.	12.85	14.35	14.85	....
Dec.	12.85	14.35	14.85	....
Av.	12.04	13.655	14.847	....

## U. K. Zinc Consumption

	British Bureau of Non-Ferrous Metal Statistics		
	(In Tons of 2,240 Pounds)		
	1955	1956	1957
Jan.	29,192	29,779	28,485
Feb.	28,814	29,568	26,276
Mar.	33,451	28,650	27,049
Apr.	27,741	25,348	24,247
May	29,237	27,922	29,589
June	31,467	26,650	25,202
July	23,695	23,826	25,934
Aug.	23,261	18,867	....
Sept.	30,080	25,470	....
Oct.	29,460	27,784	....
Nov.	31,516	27,713	....
Dec.	28,683	24,134	....
Total	346,597	315,711	....

## Mine Production of Zinc in United States (U. S. Bureau of Mines)

	(In short tons)			
	Eastern States	Central States	Western States	Total U.S.*
1952				
Total	185,939	94,410	385,652	666,001
1953				
Total	183,612	57,300	293,818	534,730
1954				
Total	166,487	63,100	234,942	464,539
1955				
Total	163,230	73,630	277,811	514,671
1956				
Feb.	13,975	5,236	23,506	42,717
Mar.	15,058	5,740	26,975	47,773
Apr.	14,172	5,098	25,618	44,888
May	14,834	5,557	26,840	47,232
June	13,730	5,228	26,135	45,093
July	13,028	5,364	24,571	42,963
Aug.	14,559	5,425	25,453	45,437
Sept.	13,567	4,628	23,785	41,980
Oct.	17,439	4,815	26,607	48,861
Nov.	15,604	4,566	25,279	45,449
Dec.	15,513	4,160	24,411	44,084
Total	175,310	61,080	301,253	537,643
1957				
Jan.	18,586	4,916	25,864	49,186
Feb.	15,989	4,658	25,200	45,847
Mar.	17,834	5,156	27,430	50,420
Apr.	18,245	4,912	27,598	50,755
May	17,066	1,744	27,250	46,060
June	16,981	2,855	25,190	45,026

\*Includes Alaskan output in some months.

## Mine Production of Lead in United States (U. S. Bureau of Mines)

	(In short tons)			
	Eastern States	Central States	Western States	Total U.S.*
1952				
Ttl.	11,252	150,302	228,607	390,161
1953				
Ttl.	9,970	136,650	188,776	335,412
1954				
Ttl.	8,608	138,940	169,804	317,352
1955				
Dec.	771	13,628	13,403	27,802
Ttl.	10,379	145,640	177,409	333,409
1956				
Feb.	1,141	12,100	15,009	28,250
Mar.	1,202	13,232	16,516	30,950
Apr.	1,028	11,948	16,729	29,705
May	1,091	12,497	16,387	29,975
June	897	11,492	17,092	29,481
July	749	11,459	15,761	27,969
Aug.	879	12,760	16,991	30,630
Sept.	868	10,632	15,915	27,415
Oct.	879	12,698	17,843	31,520
Nov.	862	10,779	16,862	28,503
Dec.	804	10,670	15,635	27,109
Ttl.	11,395	141,900	195,034	348,329
1957				
Jan.	1,002	12,513	16,714	30,229
Feb.	942	11,730	16,464	29,136
Mar.	968	11,875	18,022	30,865
Apr.	1,053	12,695	17,167	30,915
May	988	11,107	17,760	29,855
June	648	10,569	15,230	26,447

\*Includes Alaskan output in some months.

## Mine Production of Gold in United States (U. S. Bureau of Mines) (In fine ounces)

	Eastern States	Western States	Alaska*	Total
1953				
Ttl.	1,529	1,689,668	273,479	1,964,676
1954				
Ttl.	1,731	1,577,216	252,794	1,831,741
1955				
Ttl.	2,026	1,634,625	247,535	1,884,186
1956				
Feb.	154	130,368	10	130,532
Mar.	198	134,421	55	134,674
Apr.	156	136,227	522	136,911
May	175	141,240	5,085	146,494
June	199	139,541	13,112	152,852
July	45	126,628	32,515	159,188
Aug.	178	136,812	45,529	182,519
Sept.	194	137,561	40,564	178,319
Oct.	194	130,665	35,901	166,760
Nov.	206	133,456	25,506	159,162
Dec.	178	129,139	5,506	134,817
Ttl.	1,998	1,607,930	204,300	1,814,228
1957				
Jan.	183	131,954	1,134	133,271
Feb.	153	124,555	1,495	126,203
Mar.	182	137,404	1,076	138,662
Apr.	168	130,116	97	130,381
May	165	137,291	860	138,316

\* Alaska totals based on mint and smelter receipts.

## U. S. Silver Production\* (A.B.M.S.)

	(In thousands of ounces; commercial bars, 0.999 fine, and other refined forms)		
	Dom.†	For.	Total
1952 Total	40,245	36,653	76,898
1953 Total	34,697	37,764	72,461
1954 Total	38,059	39,422	77,481
1955 Total	33,101	32,780	65,881
1956			
January	3,249	4,159	7,408
February	3,615	4,033	7,648
March	3,790	3,550	7,340
April	2,898	3,191	6,089
May	2,905	3,709	6,614
June	2,501	2,248	4,749
July	3,828	2,838	6,666
August	3,035	3,818	6,853
September	2,828	3,002	5,830
October	3,454	3,125	6,579
November	2,886	2,685	5,571
December	3,168	3,802	6,970
Total	38,157	40,160	78,317
1957			
January	2,997	2,877	5,874
February	2,925	2,876	5,801
March	3,360	3,166	6,526
April	3,735	2,807	6,542
May	2,486	1,388	3,874
June	3,386	2,880	6,266
July	2,859	3,452	6,311

\* The separation between silver of foreign and domestic origin on the basis of refined bars and other refined forms is only approximate.

† Includes purchases of crude silver by the U. S. Mint.

## Mine Production of Recoverable Silver in United States (U. S. Bureau of Mines)

	(In Fine Ounces)			
	Eastern States	Missouri	Western States	Alaska*
1953 Total	158,707	223,500	36,354,685	39,111
1954 Total	142,180	283,600	36,121,368	35,140
1955 Total	159,038	438,000	36,103,723	33,804
1956				
April	43,270	32,050	3,196,813	61
May	46,770	33,300	3,063,179	770
June	46,753	30,610	3,097,297	1,595
July	51,664	31,160	2,697,372	4,171
August	45,914	35,180	3,239,671	6,333
September	46,305	28,700	2,925,332	5,666
October	42,808	34,510	3,288,177	4,942
November	46,379	29,000	3,009,312	2,400
December	45,528	25,000	2,759,108	750
Total	553,982	377,200	36,169,267	26,700
1957				
January	47,538	19,400	3,156,768	175
February	46,433	18,660	3,045,754	345
March	44,845	18,700	3,361,932	141
April	43,576	20,300	3,211,264	653
May	46,738	19,600	3,247,200	5,839

\*Alaska totals based on mint and smelter receipts.

## Production of Primary Aluminum in the U. S. (U. S. Bureau of Mines)

	(In short tons)						
	1950	1951	1952	1953	1954	1955	1956
Jan.	50,023	67,954	76,934	89,895	116,247	128,203	140,394
Feb.	54,493	62,740	72,374	92,649	110,483	116,236	132,763
Mar.	58,747	70,022	77,069	104,460	122,339	130,272	145,895
Apr.	58,024	67,701	76,880	102,071	120,434	126,394	144,726
May	51,929	67,720	80,803	105,464	125,138	131,128	150,800
June	60,400	67,454	77,476	104,152	120,758	127,634	145,726
July	63,518	72,698	78,368	109,285	126,161	132,669	151,624
Aug.	63,006	73,816	85,175	110,545	125,296	133,551	152,406
Sept.	54,449	69,429	76,882	109,333	120,332	130,606	132,316
Oct.	62,915	72,647	77,312	108,219	125,089	134,655	149,125
Nov.	62,276	72,246	74,639	105,636	121,252	133,689	145,081
Dec.	65,897	72,454	83,419	110,291	127,056	140,748	148,391
Total	718,622	836,881	937,330	1,252,013	1,460,565	1,565,721	1,679,427

## Average Silver Prices

	(Cents per fine ounce)			
	1954	1955	1956	1957
Jan.	85.25	85.25	90.357	91.375
Feb.	85.25	85.25	90.90	91.375
Mar.	85.25	85.25	91.138	91.375
Apr.	85.25	87.08	90.875	91.375
May	85.25	88.928	90.75	91.307
June	85.25	89.71	90.46	90.456
July	85.25	90.49	90.14	90.31
Aug.	85.25	90.75	90.614	90.909
Sept.	85.25	90.795	90.75	
Oct.	85.25	91.794	90.722	
Nov.	85.25	91.46	91.375	
Dec.	85.25	90.45	91.375	
Ave.	85.25	89.116	90.79	

Note — The averages are based on the price of refined bullion imported on or after August 31, 1943.

## U. S. Copper Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1957		
	Apr.	May	June
Ore, matte & regulus (cont.)	13,265	8,185	11,640
Canada	2,778	1,805	1,276
Mexico	866	405	858
Cuba	182	2,172	1,154
Bolivia	705	559	
Chile	3,428	518	998
Peru	1,339	453	1,383
Cyprus	2,123		
Philippines	2,223	2	3,227
U. of S. Africa	2,392		2,129
Australia	55		56
Other countries	2	2	
Blister copper (content)	32,558	19,892	19,083
Mexico	5,829	2,211	2,504
Chile	25,434	12,088	14,865
Peru	549		
Northern Rhodesia	746	1,623	28
U. of S. Africa		500	
Australia		3,470	1,686
Refined cathodes and shapes	11,815	19,687	9,064
Canada	7,486	7,945	6,200
Chile	1,909	1,288	500
Peru	599	4,864	1,260
Belgian Congo	1,549	949	
Northern Rhodesia	272	4,641	1,104
<b>TOTAL IMPORTS</b>			
Crude & refined	57,638	47,764	39,787
Old and scrap (content)	240	233	492
Composition metal (content)	12	12	
Brass Scrap & old (cu. cont.)	333	380	332

## U. S. Copper Scrap Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1957		
	Apr.	May	June
Copper scrap, unalloyed† (new and old)	9,137	7,362	7,019
Canada	579	272	314
Belgium	27	11	56
France	552	884	846
Germany (W.)	2,328	2,607	1,119
Netherlands	55	55	16
Sweden	164	117	
Switzerland	55	56	
U. Kingdom	385	227	221
India	165	30	103
Japan	4,677	3,559	3,862
Other countries	150	84	482
Copper-base scrap, alloyed‡ (new & old)	8,579	8,865	8,273
Canada		2	3
Mexico			3
Belgium	138	121	37
France	461	920	1,836
Germany (W.)	2,784	2,869	2,067
Italy	909	737	370
Netherlands	104	27	27
Portugal	39		24
Spain	6		6
Switzerland	28	109	29
U. Kingdom	182	25	59
India	535	409	543
Japan	3,333	3,613	3,190
Hong Kong	60	33	72
Other countries			7

† Ash, brass mill, clippings, dross, flue dust, residues, scale, skimmings, wire scrap.  
‡ Copper-base alloys, including brass and bronze—Ashes, clippings for remanufacture, cupro-nickel scrap, cupro-nickel trimmings, nickel silver scrap, phosphor bronze, phosphor copper, skimmings, turnings, round.

## U. S. Copper Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1957		
	Apr.	May	June
Ore, conc., matte & other unref. (content)	1,340	1,722	1,258
Refined ingots, bars, etc.†	32,315	28,479	31,954
Canada	135	146	666
Argentina		1,265	247
Brazil	1,306	365	247
Uruguay	220		6
Austria		56	112
Belgium			16
France	6,722	5,808	7,347
Germany (W.)	4,306	4,750	3,938
Italy	3,563	3,208	2,008
Netherlands	2,272	616	614
Norway	700		
Switzerland	1,138	737	536
Switzerland	1,138	737	536
U. Kingdom	6,702	7,729	9,388
Yugoslavia	55	27	55
Formosa		21	
India	112	1,287	2,423
Japan	4,320	2,118	2,030
U. of S. Africa	74		50
Australia	280		
Other countries	18	234	2,271
<b>Total Exports:</b>			
Crude & refined	33,655	30,201	33,212
Pipes and tubes	70	126	93
Plates and sheets	21	24	13
Rods	236	9	142
Brush-copper, castings, rolls segments (finished forms)			
n.e.s.	22	22	22
Wire, bare	1,004	1,387	1,677
Building wire and cable†	286	379	253
Weatherproof wire†	71	68	56
Insulated copper wire, n.e.s.	1,049	1,442	1,886

† Includes exports of refined copper resulting from scrap that was reprocessed on toll for account of the shipper.  
‡ Gross weight; n.e.s.—not elsewhere specified.

## U. S. Lead Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1957		
	Mar.	Apr.	May
Ore, matte, etc. (content)	18,045	16,786	12,099
Canada	2,596	1,782	1,513
Mexico	170	531	139
Guatemala	571	793	878
Honduras	168	80	504
Bolivia	2,691		964
Chile		29	
Peru	4,680	4,768	5,179
U. of S. Africa	3,519	8,049	
Australia	3,522	708	2,721
Philippines	82		126
Other countries	46	46	75
Pigs and bars	20,784	25,069	22,282
Canada	2,632	3,711	1,403
Mexico	9,241	4,886	4,252
Peru	2,500	1,814	1,812
Denmark		4	
Spain	55		909
Yugoslavia	1,533	431	6,108
Morocco		4,304	
Australia	4,823	9,919	7,798
<b>Total Imports:</b>			
Ore, base bullion, refined	38,829	41,855	34,381
Lead scrap, dross, etc. (cont.)	449	421	210
Antimonial lead & typemetal	629	280	557
Lead content thereof	585	248	531

## U. S. Zinc Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1957		
	Apr.	May	June
Slabs, blocks, etc.	1,200	877	821
Mexico	74	110	
Chile			4
Belgium	112		
Germany (W.)	84	56	
Netherlands	224	112	112
U. Kingdom	672	336	336
Korea	32	250	18
India			336
Other countries	2	13	15
<b>Total Exports:</b>			
Ore, conc., slabs, blocks	1,200	877	821
Scrap: Ashes, dross and skim.	373	555	639
Rolled in sheets, plates & strips†	238	259	166
Alloys ex brass and bronze		4	36
Die castings	106	107	64
Battery shells and parts, unansem.	6	14	35
Chromite zinc sheets, mold, castings, pattern plates, forms n.e.s.	60	16	45

† Includes photoengraving sheets and plates.

## U. S. Zinc Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1957		
	Apr.	May	June
Zinc ore (cont.)	45,630	47,619	41,633
Canada	13,220	13,672	13,487
Mexico	13,735	16,326	12,057
Cuba	155	38	48
Guatemala	626	523	1,245
Honduras	61	161	141
Bolivia	497	524	698
Chile	103		
Peru	14,644	10,114	10,017
U. of S. Africa	2,347	5,635	866
Australia	231	247	3,059
Philippines		9	6
Other countries	11	370	9
Zinc blocks, pigs, etc.	30,036	20,375	23,406
Canada	7,712	7,051	5,753
Mexico	1,481	1,764	2,708
Peru	6,727	1,830	1,350
Austria	220		
Belgium	2,244	2,488	4,176
Germany (W.)	2,269	220	1,221
Italy	1,490	635	1,465
Netherlands		280	560
U. Kingdom	1,120		
Yugoslavia	2,756	220	889
Belg. Congo	1,215	3,759	2,986
Australia	2,802	1,680	1,120
Japan		448	618
Other countries			560
<b>Total Imports:</b>			
Zinc ore, blocks, pigs	75,666	67,994	65,039
Dross and skim.	2	71	68
Old and worn out		37	7

## Comparative Metal Prices

	Av.	OPA	1957
Copper Domestic	1939	1946	Sept. 18
(Electro., Del. Valley)	11.0	14.375	26.00-27.00
Lead (N. Y.)	5.05	8.25	14.00
P. W. Zinc (E. St. Louis, f.o.b.)	5.05	5.05	10.00
New York, del.			10.50
Tin, Spo. Straits, N. Y.			93.875
Aluminum Ingot 99%+	20.00	15.00	28.10
Antimony (R.M.M. brand, f.o.b. Laredo)	12.36	14.50	33.00



# World Production of Copper

(American Bureau of Metal Statistics)  
(In Tons of 2,000 Pounds)

	United States	Canada	Mexico (crude)	Chile	Peru	Fed. Rep. of Germany	Norway	United Kingdom	Yugoslavia	India	Japan	Turkey	Australia	Northern Rhodesia	Union of South Africa
	(a)	(b)	(c)	(d)	(e)	(f)	(g-h)	(i)	(j-k)	(l)	(m)	(n)	(o)	(p)	(q)
1951	964,589	269,971	60,511	399,937	35,495	134,647	.....	.....	.....	.....	100,384	.....	16,984	349,667	38,194
1952	961,894	252,862	60,874	422,498	23,640	106,747	11,306	163,968	36,176	7,009	104,060	2,546	21,119	336,893	97,489
1953	957,819	252,652	63,380	371,742	25,803	133,330	13,306	108,604	34,331	5,709	100,381	25,641	37,080	382,884	38,341
1954	862,721	305,984	59,030	373,814	20,233	258,259	14,205	152,858	33,394	8,274	117,371	27,727	42,241	386,577	49,153
1955	1,036,702	326,599	61,583	447,288	35,478	286,805	14,876	138,271	31,151	8,432	124,908	26,313	41,935	350,302	47,176
1956	101,422	29,422	5,801	39,954	2,612	23,134	1,415	10,217	3,103	755	11,923	2,443	4,477	33,577	4,825
May	98,496	29,097	5,614	36,812	2,412	23,920	1,413	9,715	3,018	687	12,490	2,628	4,461	33,640	4,461
June	84,787	21,141	5,109	40,880	2,602	24,383	1,186	12,223	3,197	740	12,570	1,044	4,589	33,279	3,990
July	91,282	28,719	5,367	44,202	2,623	24,006	1,251	6,733	3,323	782	12,443	1,584	4,841	33,720	4,307
Aug.	88,659	31,196	5,609	47,346	.....	24,405	1,733	11,127	3,020	757	12,477	2,298	4,207	26,917	4,307
Sept.	95,109	29,977	6,488	41,475	.....	24,022	1,510	11,281	3,028	785	12,015	2,298	4,207	42,381	4,868
Oct.	90,573	29,837	5,871	46,407	.....	22,156	1,344	11,426	2,733	702	10,648	2,717	5,252	38,800	4,170
Nov.	92,231	30,423	5,521	44,911	838	21,989	1,293	9,174	2,687	786	11,993	2,064	4,707	38,892	4,290
1957	94,873	26,053	5,592	44,697	2,276	21,990	1,399	11,528	2,697	440	12,493	1,565	4,047	36,360	3,744
Jan.	92,508	29,033	4,630	41,890	3,131	20,736	956	11,178	2,586	768	12,599	1,455	4,688	35,251	3,392
Feb.	96,363	30,521	5,688	42,596	3,255	24,554	931	11,651	3,123	850	12,116	3,011	4,688	43,471	3,671
Mar.	98,910	27,917	5,139	31,761	2,559	23,515	1,635	7,853	3,049	810	8,860	3,057	5,029	37,605	.....
Apr.	96,334	26,408	5,421	38,769	4,122	23,795	1,608	12,998	3,194	810	13,479	.....	5,036	44,471	.....
May	95,891	26,295	5,107	40,262	4,987	21,816	.....	.....	.....	.....	13,930	.....	3,021	37,874	.....
June	86,216	.....	5,961	5,839	.....	.....	.....	.....	.....	.....	.....	.....	.....	31,450	.....

(a) Reported by Copper Institute. Crude. "recoverable contents of mine production or smelter production or shipments, and custom intake". Does not include intake of scrap nor of imported except that received from Cuba and Philippines. (b) Blister copper plus recoverable copper in concentrates, matte, etc., exported. (c) Crude copper, i. e., copper content of blister or converter copper as originally produced in the several countries, although some of it may be refined at home; e. g., in Rhodesia. (d) Blister and/or refined. (e) Refined. There are quantities of scrap included in the electrolytic production in addition to that reported, tonnage of which is not obtainable. (f) Smelter production. (g) Refinery production from imported blister only. (h) British Bureau of Non-Ferrous Metal Statistics. \*Refined.

# World Production of Refined Lead

(American Bureau of Metal Statistics)  
(In Tons of 2,000 Pounds)

	United States	Canada	Mexico	Peru	Belgium	France	Fed. Rep. of Germany	Italy	Spain	Yugoslavia	Japan	Australia (a)	French Morocco	Tunisia	Rhodesia	Total
1951	486,874	142,712	219,362	48,824	77,873	58,831	170,766	39,683	45,460	.....	18,516	217,301	20,287	25,476	15,646	1,602,691
1952	532,778	123,389	248,551	53,536	83,139	59,607	152,751	38,504	46,000	74,053	20,882	217,298	31,224	28,264	14,112	1,793,648
1953	598,883	166,256	225,075	68,520	84,162	60,887	164,077	40,786	53,799	78,038	25,513	241,419	29,970	30,397	12,891	1,818,778
1954	551,618	166,379	231,595	63,735	79,260	71,083	162,773	11,150	62,475	73,555	37,612	260,424	29,417	30,915	16,800	1,877,841
1955	547,153	148,811	221,138	67,303	91,241	73,251	162,508	46,806	67,509	83,347	40,912	254,558	28,870	28,620	17,976	1,893,125
1956	47,961	11,990	17,611	6,970	9,188	6,814	14,022	4,511	5,660	5,786	4,142	15,984	798	2,372	1,456	156,551
May	47,367	11,591	18,091	6,779	9,481	6,704	14,302	3,100	4,767	7,296	3,972	19,664	.....	2,064	1,456	167,830
June	48,479	12,374	18,515	6,415	9,965	6,377	12,165	3,887	5,195	7,827	4,202	27,935	2,876	1,841	1,456	170,488
July	48,404	12,196	18,890	6,192	9,872	1,896	11,586	2,440	4,724	7,546	4,126	19,757	4,151	1,933	1,490	155,665
Aug.	53,530	12,706	18,567	6,378	9,243	6,071	13,671	2,833	5,962	6,182	4,614	23,654	3,630	2,970	1,344	172,788
Sept.	54,815	13,923	20,169	2,237	9,243	6,071	13,671	2,833	5,962	6,182	4,614	23,654	3,630	2,970	1,344	172,788
Oct.	50,744	12,914	17,934	9,312	7,883	17,779	3,319	5,343	7,632	4,494	3,220	22,220	.....	2,180	1,232	165,232
Nov.	54,062	12,531	17,088	5,787	9,540	1,737	17,094	3,667	5,113	7,747	4,885	22,263	1,948	2,724	1,344	169,392
1957	50,854	10,117	19,212	5,676	9,971	8,084	16,540	3,196	5,389	6,195	4,928	21,498	4,052	1,261	1,344	169,640
Jan.	48,012	10,192	18,574	5,736	9,969	7,970	14,516	3,519	3,980	6,213	4,863	17,060	3,759	2,544	1,323	159,984
Feb.	52,357	12,727	17,873	6,431	9,906	8,103	16,420	3,574	6,031	8,643	4,464	18,515	2,215	2,817	1,120	172,730
Mar.	56,170	12,436	20,235	5,915	9,359	7,624	17,559	3,408	6,235	7,515	3,416	18,127	2,047	1,733	1,400	174,930
Apr.	51,718	13,172	13,942	5,355	9,766	8,890	17,424	3,275	.....	6,610	5,477	25,268	2,211	2,490	1,400	.....
May	48,203	.....	8,524	6,083	.....	7,809	13,802	3,537	.....	.....	4,835	.....	2,592	1,997	1,456	.....
June	47,100	.....	15,831	6,768	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,456	.....	.....

(a) Production credited to Australia includes lead refined in England from Australian base bullion.

# World Production of Slab Zinc

(American Bureau of Metal Statistics)  
(In Tons of 2,000 Pounds)

	United States	Can.	Mexico	Peru	Belgium	France	Fed. Rep. of Germany	Great Britain	Italy	Netherlands	Norway	Spain	Yugoslavia	Japan	Australia (a)	Rhodesia (b)	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
1951	981,833	218,648	57,990	1,003	220,479	82,184	155,024	78,101	52,058	24,924	44,971	22,444	.....	62,109	88,103	25,391	2,065,216
1952	961,480	223,140	61,455	5,491	205,909	88,255	162,272	74,981	60,438	28,555	43,061	23,329	15,943	77,203	97,931	25,687	2,141,989
1953	971,191	247,707	59,589	9,819	213,215	99,218	163,430	81,436	65,780	27,721	42,566	24,162	16,937	86,833	101,008	28,370	2,238,017
1954	868,242	218,810	60,477	16,982	234,806	122,248	184,806	90,937	74,356	28,636	48,768	25,109	15,040	112,292	117,066	29,786	2,243,591
1955	1,031,018	257,008	61,879	18,943	233,623	123,623	197,024	90,917	77,761	31,203	49,724	26,244	15,175	122,965	113,221	31,248	2,534,457
1956	81,238	21,790	5,248	1,225	21,800	11,174	17,212	6,719	7,190	2,662	4,168	2,226	1,289	18,401	10,012	2,688	214,194
May	78,321	20,780	5,142	1,439	21,030	11,003	16,884	8,867	6,270	2,530	4,437	2,175	1,282	12,466	8,606	2,632	208,435
June	83,080	21,691	5,198	1,285	21,015	10,679	17,964	8,617	6,483	2,637	4,688	2,047	1,325	13,089	11,141	2,800	216,209
July	89,549	21,354	5,154	1,427	20,996	10,846	17,633	6,925	6,995	2,543	4,826	1,915	1,420	12,385	10,032	2,464	221,801
Aug.	90,235	20,691	5,018	.....	21,207	10,210	17,187	9,130	6,817	2,452	4,487	1,918	1,287	12,674	9,866	2,744	220,868
Sept.	93,493	21,412	5,257	.....	21,153	8,871	17,428	6,773	7,334	2,718	4,743	2,110	1,244	13,497	10,171	2,800	224,159
Oct.	91,908	20,470	5,060	.....	21,044	9,257	16,851	6,443	7,037	2,727	4,538	2,087	1,414	12,717	9,810	2,716	219,916
Nov.	92,234	22,012	5,291	880	21,816	10,088	17,835	8,135	7,249	2,745	4,654	2,151	1,425	11,819	10,257	2,826	233,020
1957	93,452	20,340	5,357	1,560	22,466	11,464	17,700	6,360	6,944	2,922	4,424	1,896	2,734	11,361	10,166	2,856	228,017
Jan.	88,078	19,808	4,788	2,346	22,354	10,571	15,903	6,256	6,186	2,552	3,851	1,694	2,447	10,632	9,130	2,520	213,521
Feb.	96,924	21,942	5,334	2,352	22,466	12,449	17,627	6,537	6,719	2,820	4,478	2,124	2,526	9,754	11,114	2,352	234,556
Mar.	96,506	20,504	5,129	2,380	22,283	12,112	16,903	6,802	7,174	2,647	4,252	2,009	2,561	9,546	10,037	2,744	.....
Apr.	96,855	20,565	5,219	2,650	23,119	17,700	17,108	7,345	7,080	2,881	4,468	.....	2,748	14,213	10,336	2,800	.....
May	90,719	19,929	5,011	2,701	.....	12,498	16,521	6,829	7,110	.....	4,473	.....	.....	13,760	.....	2,800	.....
June	85,744	20,062	5,263	3,018	.....	.....	7,236	.....	.....	.....	4,690	.....	.....	.....	.....	2,856	.....

(a) Partially electrolytic. (b) Entirely electrolytic. (c) Beginning 1954 both electrolytic and electrothermic. (d) The above totals omit production in Russia, Czechoslovakia, Poland and in Argentina.

## U. K. Virgin Copper Stocks

(In long tons)

British Bureau of Non-Ferrous Metal Statistics

At start of:	1955	1956	1957
Jan. ....	61,480	76,197	59,614
Feb. ....	62,771	79,377	59,203
Mar. ....	70,185	71,634	62,120
Apr. ....	67,566	73,776	61,779
May ....	60,767	76,481	71,101
June ....	58,546	71,713	61,991
July ....	64,256	76,188	64,121
Aug. ....	99,628	68,197	81,146
Sept. ....	107,261	72,069	.....
Oct. ....	93,681	62,327	.....
Nov. ....	75,533	58,893	.....
Dec. ....	77,749	55,838	.....

## U. K. Refined Lead Stocks

(British Bureau of Non-Ferrous Metal Statistics)

(In long tons)

At start of:	1955	1956	1957
Jan. ....	31,173	40,987	39,420
Feb. ....	32,274	34,326	41,433
Mar. ....	39,461	29,693	36,900
Apr. ....	37,587	33,974	34,877
May ....	45,226	29,479	44,933
June ....	38,760	30,537	40,804
July ....	30,816	37,088	42,148
Aug. ....	32,270	35,432	48,275
Sept. ....	48,036	35,793	.....
Oct. ....	42,912	39,391	.....
Nov. ....	42,061	32,662	.....
Dec. ....	38,410	32,025	.....

## U. K. Stocks of Zinc

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

Virgin Zinc Zinc Conc.

At start of:	1956	1957	1956	1957
Jan. ....	49,962	44,816	54,447	53,274
Feb. ....	45,239	40,501	49,537	63,366
Mar. ....	44,288	38,927	48,667	59,957
Apr. ....	49,194	41,260	40,502	55,698
May ....	49,129	37,540	36,524	52,871
June ....	47,266	36,000	40,136	49,646
July ....	47,644	37,384	40,763	55,900
Aug. ....	49,169	35,561	47,972	52,588
Sept. ....	51,946	.....	57,125	.....
Oct. ....	50,978	.....	55,354	.....
Nov. ....	47,364	.....	54,376	.....
Dec. ....	46,364	.....	55,223	.....

## U. K. Copper Exports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	May	June	July
(Gross Weight)			
Copper			
unwrought —			
ingots, blocks,			
slabs, bars, etc.	3,161	2,972	1,627
Plates, sheets,			
rods, etc. ....	2,907	1,636	2,602
Wire (including			
uninsulated			
electric wire) ..	3,545	6,725	3,110
Tubes .....	1,173	1,013	1,408
Other copper,			
worked (incl.			
pipe fittings) ..	104	119	86
Total .....	10,890	12,465	8,833

## Copper Consumption in United Kingdom

British Bureau of Non-Ferrous Metal Statistics  
(In tons of 2,240 pounds)

	Unalloyed	Alloyed*	Total	Virgin	Scrap
1953 Total .....	243,717	192,337	447,260	322,311	124,949
1954 Total .....	328,149	251,989	580,138	448,413	131,725
1955 Total .....	377,576	281,953	659,529	496,467	163,062
1956					
April .....	27,489	21,029	48,518	36,418	12,100
May .....	29,845	22,295	52,140	41,747	10,393
June .....	33,774	21,810	55,584	43,622	11,962
July .....	31,752	19,316	51,068	39,149	11,919
August .....	24,426	14,434	38,860	30,065	8,795
September .....	35,203	19,584	54,787	45,807	8,980
October .....	36,824	21,275	58,099	47,814	10,285
November .....	38,244	21,142	59,386	47,144	12,242
December .....	29,927	17,437	47,364	38,505	8,859
Total .....	388,167	251,312	639,479	500,794	138,685
1957					
January .....	40,014	21,574	61,588	51,118	10,470
February .....	36,191	19,849	56,040	43,326	12,714
March .....	33,537	19,895	53,432	42,787	10,645
April .....	33,744	18,124	51,868	40,940	10,928
May .....	36,721	21,395	58,116	44,740	13,376
June .....	32,922	18,332	51,254	39,756	11,498
July .....	32,049	19,388	51,437	38,441	12,996

\*Includes copper sulphate effective October, 1954.

## U. K. Zinc Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	May	June	July
(Gross Weight)			
Zinc ore			
and conc. ....	7,586	25,763	4,974
Zinc conc. ....	3,174	14,113	...
Australia .....	3,174	13,378	...
Burma .....	735	...	...
Zinc and			
zinc alloys ....	14,287	13,820	10,778
N. Rhodesia ...	250	125	250
Australia .....	1,250	250	600
Canada .....	6,708	7,483	6,051
Belgium .....	1,668	1,745	808
Germany (W.) ..	501	1	1
Netherlands ...	325	1,066	...
United States ...	875	300	300
Other countries	2,710	2,850	2,768
Of which:			
Zinc or spelter,			
unwrought in			
ingots, blocks,			
bars, slabs and			
cakes .....	14,287	13,820	10,778

## Zinc Imports and Exports By Principal Countries

(A. B. M. S.)

Reported in pigs, bars, etc.; metric tons except where otherwise noted.

	1957	1957	1957
	Apr.	May	June
IMPORTS			
U. S. (s.t.) .....	30,036	20,375	23,406
Canada (s.t.) ...	4	...	...
Denmark .....	484	700	240
France .....	1,392	1,177	509
Italy .....	708	476	...
Netherlands ....	568	1,234	...
Sweden .....	1,220	2,139	...
Switzerland* ...	2,380	1,328	1,213
U. K. (l.t.) .....	13,955	14,287	13,820
India† (l.t.) ....	3,865	2,653	...
EXPORTS			
U. S. (s.t.) .....	1,200	877	821
Canada (s.t.) ...	17,131	16,679	16,157
Denmark .....	...	...	50
France .....	...	...	5
Italy .....	1,617	1,511	...
Netherlands ....	832	2,590	...
Norway .....	2,106	2,790	...
Switzerland* ...	488	751	347
U. K.† (l.t.) ....	343	629	374
Northern			
Rhodesia† (l.t.)	2,495	2,539	...
Australia† (l.t.)	3,598	4,260	...

\* Includes scrap.

† Includes manufactures.

British Bureau of Non-Ferrous Metal Statistics.

## United Kingdom Tin Statistics

(British Bureau of Non-Ferrous Metal Statistics)

	Imports	Production*	Stock at end of period*	Imports	Production*	Tin Metal Consumption	Exports & Re-exports	Stock at end of period
1955 Total .....	27,084	1,034	2,181	1,227	27,241	22,390	8,924	2,999
1956								
June .....	1,647	74	1,240	69	2,860	1,803	457	3,424
July .....	3,100	111	2,240	178	2,082	1,854	406	3,460
August .....	2,691	48	2,713	20	1,931	1,777	533	3,784
September .....	934	83	1,277	247	2,575	1,903	1,153	3,274
October .....	3,396	101	2,561	73	2,272	2,223	953	2,737
November .....	2,034	88	2,308	445	2,293	1,997	511	3,436
December .....	2,305	91	2,393	131	2,118	1,649	686	3,175
1956 Total .....	26,571	1,044	2,393	2,226	26,434	22,232	8,371	3,175
1957								
January .....	3,584	105	3,359	25	2,519	2,134	863	2,878
February .....	2,468	80	2,812	25	2,688	1,936	890	3,169
March .....	4,342	85	4,689	66	2,835	1,878	863	3,450
April .....	2,192	87	3,952	379	2,074	1,752	576	3,281
May .....	3,019	89	3,637	111	3,564	2,240	896	4,043
June .....	2,689	90	...	158	2,735	1,799	693	4,692

\*As reported by International Tin Study Group. Production of Tin Metal includes production from imported scrap and residues refined on toll. Stocks exclude strategic stock but include official warehouse stocks.

## Canada's Copper Output

(Dominion Bureau of Statistics)

(Refined Copper)  
(In Tons)

	1954	1955	1956	1957
Jan. . .	15,001	22,600	26,653	25,469
Feb. . .	13,954	21,455	26,229	21,861
Mar. . .	21,075	25,083	26,750	27,664
Apr. . .	20,412	24,077	26,617	27,398
May . . .	23,012	23,840	27,626	29,086
June . . .	23,344	21,890	27,122	24,093
July . . .	21,582	21,185	27,250	....
Aug. . .	22,000	26,184	29,219	....
Sept. . .	22,684	24,752	27,950	....
Oct. . .	21,681	25,546	29,696	....
Nov. . .	22,981	25,213	27,346	....
Dec. . .	24,935	27,172	28,716	....
Year	252,643	288,987	331,174	....

## Canada's Lead Exports

(Dominion Bureau of Statistics)

(In Pigs)  
(In Tons)

	1954	1955	1956	1957
Jan. . .	6,170	5,500	4,888	8,946
Feb. . .	7,560	11,882	3,856	6,633
Mar. . .	11,092	10,318	4,007	7,044
Apr. . .	9,606	11,967	7,636	7,314
May . . .	11,483	6,416	7,214	9,676
June . . .	12,018	9,897	6,632	7,210
July . . .	13,152	8,341	9,696	....
Aug. . .	8,646	4,884	4,713	....
Sept. . .	10,045	5,538	9,908	....
Oct. . .	8,005	8,053	9,072	....
Nov. . .	10,817	4,622	9,227	....
Dec. . .	7,815	5,286	2,734	....
Year	116,406	92,407	79,633	....

## Canada's Silver Exports

(Dominion Bureau of Statistics)

(In ores and concentrates)  
(Fine Ounces)

	1955	1956	1957
Jan. . .	429,704	435,047	1,070,285
Feb. . .	457,261	196,803	1,039,491
Mar. . .	411,597	328,857	1,192,826
Apr. . .	493,578	348,838	1,247,029
May . . .	445,054	447,710	1,254,526
June . . .	592,238	495,742	972,946
July . . .	285,350	686,209	....
Aug. . .	644,932	1,080,301	....
Sept. . .	636,992	481,042	....
Oct. . .	684,301	731,099	....
Nov. . .	387,147	669,285	....
Dec. . .	405,719	1,023,481	....
Year	5,873,873	6,924,414	....

## Canada's Copper Exports

(Ingots, bars, slabs and billets)

(In Tons)

	1954	1955	1956	1957
Jan. . .	9,081	11,078	15,981	20,582
Feb. . .	8,385	12,897	11,041	16,272
Mar. . .	11,671	12,423	12,276	14,720
Apr. . .	11,218	10,321	14,476	16,417
May . . .	18,407	10,911	12,851	19,048
June . . .	14,877	13,387	10,985	10,826
July . . .	15,467	12,674	13,599	....
Aug. . .	14,158	13,219	14,710	....
Sept. . .	14,069	13,479	17,268	....
Oct. . .	11,528	14,208	13,896	....
Nov. . .	13,372	14,545	19,130	....
Dec. . .	13,897	14,057	18,630	....
Year	156,130	153,199	174,843	....

## Canada's Zinc Output

(Dominion Bureau of Statistics)

(Refined Zinc)  
(In Tons)

	1954	1955	1956	1957
Jan. . .	17,155	22,028	21,696	20,340
Feb. . .	15,199	19,865	20,356	19,808
Mar. . .	16,550	22,215	22,010	21,941
Apr. . .	16,249	21,301	21,339	20,504
May . . .	16,530	21,599	21,790	20,564
June . . .	17,017	20,565	20,780	19,928
July . . .	17,917	21,769	21,691	....
Aug. . .	18,755	22,029	21,354	....
Sept. . .	18,023	20,898	20,691	....
Oct. . .	18,871	22,206	21,412	....
Nov. . .	19,662	21,398	20,470	....
Dec. . .	21,922	21,135	22,012	....
Year	213,810	257,008	255,601	....

## Canada's Silver Output

(Dominion Bureau of Statistics)

(In Ounces)

	1955	1956	1957
Jan. . .	2,182,386	2,280,575	2,142,746
Feb. . .	1,960,506	2,094,467	2,004,733
Mar. . .	2,413,591	2,296,648	2,307,709
Apr. . .	2,304,287	1,759,384	2,195,457
May . . .	2,235,620	2,463,374	2,089,824
June . . .	2,461,675	2,494,748	2,166,739
July . . .	2,385,654	2,267,271	....
Aug. . .	2,480,607	2,315,312	....
Sept. . .	2,386,385	2,517,451	....
Oct. . .	2,371,890	2,379,162	....
Nov. . .	2,088,991	2,429,547	....
Dec. . .	2,388,627	2,357,202	....
Year	27,696,319	27,655,141	....

## Canada's Lead Output

(Dominion Bureau of Statistics)

(Recoverable Lead)\*  
(In Tons)

	1954	1955	1956	1957
Jan. . .	17,716	18,959	16,002	14,032
Feb. . .	16,863	15,018	14,344	15,170
Mar. . .	17,104	19,113	16,857	16,940
Apr. . .	19,452	17,889	11,573	14,275
May . . .	19,953	16,808	15,446	14,591
June . . .	18,988	17,800	18,145	16,431
July . . .	19,164	16,650	15,841	....
Aug. . .	18,237	16,676	16,104	....
Sept. . .	17,066	15,972	15,760	....
Oct. . .	16,569	13,658	16,725	....
Nov. . .	18,365	15,182	14,865	....
Dec. . .	19,093	17,857	16,056	....
Year	219,280	201,583	188,971	....

\* New base bullion from Canadian ores plus recoverable lead in ores or concentrates shipped for export.

## Canada's Zinc Exports

(Dominion Bureau of Statistics)

(Slabs in Tons)

	1954	1955	1956	1957
Jan. . .	16,625	22,181	15,550	19,304
Feb. . .	11,328	25,556	11,757	16,618
Mar. . .	18,199	20,178	8,822	14,923
Apr. . .	17,926	21,018	14,317	17,131
May . . .	13,926	14,820	11,357	16,680
June . . .	15,654	19,581	15,296	16,157
July . . .	27,582	13,522	15,499	....
Aug. . .	14,934	16,581	13,070	....
Sept. . .	17,298	11,793	19,732	....
Oct. . .	13,064	19,836	20,792	....
Nov. . .	16,224	14,164	21,411	....
Dec. . .	23,277	14,607	16,125	....
Year	206,037	213,837	183,728	....

## Canada's Nickel Output

(Dominion Bureau of Statistics)

(In Tons)

	1954	1955	1956	1957
Jan. . .	12,765	14,387	14,985	16,609
Feb. . .	11,874	13,375	14,997	15,027
Mar. . .	13,619	15,544	15,504	16,733
Apr. . .	13,015	15,011	14,431	15,347
May . . .	13,458	15,352	15,203	16,225
June . . .	13,269	14,835	14,492	15,425
July . . .	12,901	14,530	15,125	....
Aug. . .	13,428	14,825	14,852	....
Sept. . .	13,521	13,734	14,530	....
Oct. . .	14,323	14,411	15,762	....
Nov. . .	14,159	14,290	15,062	....
Dec. . .	14,947	14,881	14,824	....
Year	161,279	175,173	178,767	....

METALS, SEPTEMBER, 1957



## Canadian Copper Exports

(Dominion Bureau of Statistics)

(In tons of 2,000 lbs.)

	1957		
	Mar.	Apr.	May
Ore, matte, regulus, etc. (content) . . . . .	3,997	4,677	2,112
United States . . . . .	2,254	2,865	1,302
Germany (W.) . . . . .	...	...	2
Norway . . . . .	1,710	1,665	735
U. Kingdom . . . . .	33	147	73
Ingots, bars, billets, anodes . . . . .	14,720	16,417	19,048
United States . . . . .	7,496	7,353	9,423
Brazil . . . . .	88	...	74
Denmark . . . . .	...	...	6
France . . . . .	656	504	1,625
Italy . . . . .	...	112	252
Sweden . . . . .	224	225	59
Switzerland . . . . .	56	281	...
U. Kingdom . . . . .	6,002	7,936	7,328
India . . . . .	196	...	281
Other countries . . . . .	2	6	...
<b>Total Exports:</b>			
Crude & refined . . . . .	18,717	21,094	21,160
Old and scrap . . . . .	995	636	1,144
Rods, strips, sheet and tubing . . . . .	1,330	571	976

## Canadian Zinc Exports

(Dominion Bureau of Statistics)

(In tons of 2,000 lbs.)

	1957		
	Mar.	Apr.	May
Ore (zinc content) . . . . .	10,555	12,750	13,377
United States . . . . .	10,555	12,750	13,377
Slab zinc . . . . .	14,923	17,131	16,679
United States . . . . .	8,400	9,021	6,469
Italy . . . . .	...	...	224
Netherlands . . . . .	56	...	...
U. Kingdom . . . . .	6,168	7,764	9,530
Korea . . . . .	276	80	128
Philippines . . . . .	...	243	328
Taiwan . . . . .	23	23	...
<b>Total Exports:</b>			
Ore and slabs . . . . .	25,478	29,881	30,056
Zinc scrap, dross, ashes . . . . .	35	179	1,444
United States . . . . .	35	...	108
Belgium . . . . .	...	...	485
Netherlands . . . . .	...	27	371
Japan . . . . .	...	152	480

## Canadian Lead Exports

(Dominion Bureau of Statistics)

(In tons of 2,000 lbs.)

	1957		
	Mar.	Apr.	May
Ore (lead content) . . . . .	2,220	1,559	1,395
United States . . . . .	2,220	1,559	1,395
Refined lead . . . . .	7,044	7,314	9,676
United States . . . . .	2,690	3,509	1,576
Brazil . . . . .	...	56	31
Venezuela . . . . .	...	...	44
Germany (W.) . . . . .	112	...	...
U. Kingdom . . . . .	2,128	2,968	6,468
Japan . . . . .	2,051	777	1,554
Taiwan . . . . .	62	...	...
Other countries . . . . .	1	4	3
<b>Total Exports:</b>			
Ore and refined . . . . .	9,264	8,873	11,071
Pipe and tubing . . . . .	1	...	1
Lead scrap . . . . .	1	...	...

METALS, SEPTEMBER, 1957

## Copper Imports and Exports By Principal Countries

(A. B. M. S.)

Reported in ingots, slabs, etc.; metric tons except where otherwise noted.

IMPORTS			
	1957		
	Mar.	Apr.	May
U. S. (ore, s.t.) . . . . .	9,737	13,265	8,185
(blister, s.t.) . . . . .	29,081	32,558	19,892
(refined, s.t.) . . . . .	16,155	11,815	19,687
Denmark . . . . .	150	433	358
France (crude) . . . . .	...	813	1,313
(refined) . . . . .	13,907	17,352	14,636
Italy . . . . .	9,339	...	...
Netherlands . . . . .	2,188	1,934	1,040
Norway . . . . .	527	75	...
Sweden . . . . .	3,255	5,110	5,357
Switzerland . . . . .	3,189	5,841	3,476
U. K. (l.t.) . . . . .	39,177	39,944	34,528
Australia (blister & ref., l.t.)† . . . . .	1,000	...	...
EXPORTS			
	1957		
	Mar.	Apr.	May
U. S. (ore and unref., s.t.) . . . . .	1,972	1,340	1,722
(ref., s.t.) . . . . .	41,376	32,315	28,479
Canada . . . . .	14,770	16,417	19,048
(ref., s.t.) . . . . .	271	50	415
Finland* . . . . .	1,045	646	...
Norway . . . . .	336	162	1,801
Sweden . . . . .	4,766	3,512	3,161
U. K. (l.t.) . . . . .	32,460	27,555	...
No Rhodesia (ref. & blister, l.t.)† . . . . .	...	...	...

\* Includes old.

† British Bureau of Non-Ferrous Metal Statistics.

## U. K. Copper Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	1957		
	Apr.	May	June
Copper and copper alloys:			
(Gross Weight) . . . . .	39,944	34,528	35,203
U. of S. Africa . . . . .	81	...	111
N. Rhodesia . . . . .	18,204	14,897	13,854
Canada . . . . .	6,751	6,085	7,473
Belgium . . . . .	1	...	...
Germany (W.) . . . . .	11	10	7
Norway . . . . .	125	1	...
United States . . . . .	8,197	6,656	8,174
Chile . . . . .	5,550	5,950	5,534
Peru . . . . .	235	400	25
Turkey . . . . .	492	...	...
Belg. Congo . . . . .	250	500	...
Other countries . . . . .	47	29	25
Of which:			
Electrolytic . . . . .	25,897	23,910	23,528
Other refined . . . . .	3,775	2,000	4,835
Blister or rough . . . . .	10,213	8,577	6,794
Wrought and alloys . . . . .	59	41	46
<b>Total . . . . .</b>	<b>39,944</b>	<b>34,528</b>	<b>35,203</b>

## Canada's Nickel Exports

(Dominion Bureau of Statistics)

(Refined, in oxides, matte, etc.)

(In Tons)

	1955	1956	1957
January . . . . .	14,421	15,121	14,760
February . . . . .	13,915	13,940	9,874
March . . . . .	13,564	16,219	14,958
April . . . . .	16,083	14,448	18,671
May . . . . .	14,761	14,729	18,351
June . . . . .	16,296	16,403	14,539
July . . . . .	13,929	11,079	...
August . . . . .	14,861	18,470	...
September . . . . .	14,638	13,849	...
October . . . . .	13,589	12,800	...
November . . . . .	13,073	14,084	...
December . . . . .	14,749	15,694	...
<b>Year . . . . .</b>	<b>173,879</b>	<b>176,837</b>	<b>...</b>

## French Copper Imports

(A.B.M.S.)

(In metric tons)

	1957		
	Mar.	Apr.	May
Crude copper for refining (blister, black and cement) . . . . .	...	813	1,313
Belg. Congo . . . . .	...	813	813
Turkey . . . . .	...	...	500
Refined . . . . .	13,907	17,352	14,636
United States . . . . .	2,236	5,883	3,993
Canada . . . . .	1,136	457	1,321
Chile . . . . .	...	314	...
Belgium . . . . .	3,955	4,912	4,701
Germany (W.) . . . . .	724	511	215
Norway . . . . .	102	254	...
Sweden . . . . .	102	...	...
U. Kingdom . . . . .	701	539	919
Belg. Congo . . . . .	3,768	2,536	1,945
Rhodesia-Nyasaland . . . . .	1,183	1,795	1,542
Other countries . . . . .	...	151	...

## French Zinc Imports

(A.B.M.S.)

(In metric tons)

	1957		
	Mar.	Apr.	May
Ore (gross weight) . . . . .	24,916	26,352	23,123
Peru . . . . .	3,969	6,127	250
Greece . . . . .	3,407	2,176	...
Italy . . . . .	...	583	3,328
Norway . . . . .	961	...	456
Portugal . . . . .	...	...	269
Spain . . . . .	3,489	...	1,619
Sweden . . . . .	...	...	260
Yugoslavia . . . . .	2,050	...	800
Algeria . . . . .	344	3,541	3,021
Morocco . . . . .	9,009	8,494	7,607
Tunisia . . . . .	...	1,645	818
Australia . . . . .	1,687	3,786	4,695
Slabs, bars, blocks, etc. . . . .	1,071	1,392	1,177
Belgium . . . . .	996	975	940
Germany (W.) . . . . .	...	275	...
Italy . . . . .	50	66	137
Norway . . . . .	25	50	100
Russia . . . . .	...	26	...

## French Metal Exports

(A.B.M.S.)

(In metric tons)

	1957		
	Mar.	Apr.	May
<b>LEAD</b>			
Ore (gross weight) . . . . .	736	294	38
Pig lead . . . . .	518	272	26
Switzerland . . . . .	515	255	...
Other countries . . . . .	3	17	26
Antimonial lead . . . . .	33	33	11
<b>ZINC</b>			
Slabs, bars, blocks, etc. . . . .	51	...	...

IT PAYS  
to  
ADVERTISE  
in the  
DAILY METAL REPORTER

## Nonferrous Castings

MONTHLY SHIPMENTS, BY TYPE OF METAL  
(Bureau of Census — Thousands of Pounds)

	Alu- minum	Copper	Mag- nesium	Zinc	Lead Die
1952 Total	518,979	1,009,910	34,857	408,353	20,941
1953 Total	658,022	990,496	34,517	521,253	20,444
1954 Total	607,764	834,557	25,572	474,741	18,396
1955 Total	833,058	1,011,748	27,892	781,254	21,045
1956					
January	74,152	89,767	2,959	68,050	1,598
February	73,096	91,706	2,977	66,584	1,636
March	73,785	96,085	3,046	65,760	1,644
April	67,880	90,679	3,140	58,274	1,910
May	65,786	89,188	3,021	52,205	1,919
June	58,189	78,921	2,949	47,775	1,883
July	52,955	69,926	2,810	42,227	1,551
August	61,507	77,619	3,059	52,321	2,112
September	62,503	72,109	3,079	46,340	1,004
October	74,209	81,049	3,442	65,450	2,206
November	69,741	72,866	2,892	64,972	1,788
December	67,333	65,198	2,794	58,111	1,483
Total	801,136	966,473	36,168	88,069	20,734
1957					
January	72,999	82,025	3,207	67,964	1,883
February	69,651	72,084	2,661	59,793	1,435
March	74,527	77,418	2,970	61,378	1,865
April	68,284	77,167	2,896	54,982	2,070
May	65,108	75,347	2,832	53,565	2,373
June	58,547	70,959	2,973	49,356	2,336

## Copper Castings Shipments

BY TYPE OF CASTING  
(Bureau of Census) (Thousands of Pounds)

	Total	Sand	Permanent	Die	All Other
1951 Total	1,197,443	1,075,437	69,883	12,516	39,607
1952 Total	1,009,910	910,862	63,865	8,259	26,924
1953 Total	990,496	888,369	61,316	10,077	30,734
1954 Total	834,557	751,804	48,849	6,480	27,394
1955 Total	1,011,748	907,852	63,041	8,541	31,408
1956					
January	89,767	80,116	6,135	799	2,717
February	91,706	82,244	5,888	727	2,847
March	96,085	85,894	6,299	782	3,110
April	90,679	81,333	5,835	722	2,789
May	89,188	80,155	5,398	751	2,854
June	78,921	70,260	5,052	755	2,854
July	60,926	55,027	3,193	506	2,260
August	77,619	70,479	3,805	904	2,431
September	72,109	64,887	3,930	929	2,363
October	81,049	73,058	4,104	1,120	2,767
November	72,866	65,022	4,114	1,057	2,673
December	65,198	57,929	3,769	971	2,529
Total	966,113	866,404	57,522	10,023	32,134
1957					
January	82,025	73,702	4,510	1,008	2,805
February	72,084	64,346	4,188	874	2,676
March	77,418	69,258	4,445	878	2,837
April	77,167	69,141	4,316	894	2,816
May	75,347	67,251	4,421	953	2,722
June	70,959	63,910	3,590	868	2,591

## Nickel Averages

Electro, cathode sheets, 99.00%,  
f.o.b. refinery, duty included  
(Cents per pound)

	1954	1955	1956	1957
Jan.	60.00	64.50	64.50	74.00
Feb.	60.00	64.50	64.50	74.00
Mar.	60.00	64.50	64.50	74.00
Apr.	60.00	64.50	64.50	74.00
May	60.00	64.50	64.50	74.00
June	60.00	64.50	64.50	74.00
July	60.00	64.50	64.50	74.00
Aug.	60.00	64.50	64.50	74.00
Sept.	60.00	64.50	64.50	....
Oct.	60.00	64.50	64.50	....
Nov.	60.98	64.50	64.50	....
Dec.	64.50	64.50	72.48	....
Av.	60.46	64.50	65.165	....

## Platinum Averages

N. Y. MONTHLY QUOTATIONS  
(Dollars per Troy Ounce)

	1954	1955	1956	1957
Jan.	91.40	81.00	106.30	101.92
Feb.	91.00	78.16	104.34	98.59
Mar.	87.88	78.00	104.23	93.50
Apr.	85.50	77.94	103.92	93.45
May	85.50	77.50	105.23	92.865
June	85.50	78.33	106.50	92.02
July	85.50	81.78	106.50	90.265
Aug.	85.00	84.59	105.76	84.426
Sept.	85.50	91.96	105.50	....
Oct.	83.62	94.60	104.85	....
Nov.	81.07	103.11	104.50	....
Dec.	80.64	106.58	104.50	....
Av.	85.72	86.12	105.18	....

## Spot Straits Tin

(Straits, Open Market, N. Y.)

	Monthly Average Prices			
	1954	1955	1956	1957
Jan.	85.125	87.268	105.036	101.511
Feb.	85.16	90.836	100.803	101.132
Mar.	92.457	91.161	100.786	99.643
Apr.	96.298	91.48	99.268	99.304
May	93.51	91.41	96.994	98.347
June	94.24	93.68	94.589	98.05
July	96.55	97.08	96.143	96.52
Aug.	93.381	96.521	99.049	94.261
Sept.	93.536	96.607	103.809	....
Oct.	93.225	96.20	106.023	....
Nov.	91.176	97.987	110.921	....
Dec.	88.571	108.02	104.268	....
Aver.	91.935	94.85	101.474	....

## Prompt Tin Prices

(Straits, Open Market, N. Y.)

	Monthly Average Prices (Cents per pound)			
	1954	1955	1956	1957
Jan.	84.84	87.628	104.768	101.347
Feb.	85.04	90.75	100.586	100.257
Mar.	91.24	91.065	100.524	99.476
Apr.	96.238	91.41	99.145	99.286
May	93.51	91.38	96.853	98.335
June	94.24	93.64	94.488	98.025
July	96.55	96.825	96.131	96.44
Aug.	93.381	96.456	98.924	94.159
Sept.	93.536	96.256	103.559	....
Oct.	93.00	96.075	105.716	....
Nov.	91.099	97.882	110.329	....
Dec.	88.571	107.75	104.00	....
Av.	91.77	94.73	101.252	....

## Quicksilver Averages

N. Y. Monthly Averages  
Virgin, Dollars per 76-lb. Flask

	1954	1955	1956	1957
Jan.	189.60	324.68	277.88	256.00
Feb.	190.00	324.68	270.29	256.00
Mar.	201.63	322.61	261.40	256.00
Apr.	221.36	318.14	267.22	256.00
May	251.20	306.62	267.675	256.00
June	273.46	286.98	260.69	256.00
July	287.40	268.22	256.06	256.00
Aug.	290.71	255.18	256.00	252.20
Sept.	314.08	263.70	256.00	....
Oct.	329.50	279.02	255.92	....
Nov.	321.17	282.50	255.13	....
Dec.	319.96	282.27	256.00	....
Av.	265.84	292.90	261.71	....

METALS, SEPTEMBER, 1957

## Primary Aluminum Output, Shipments and Stocks

(U. S. Department of Interior)

	Stocks beginning of month short tons	Production short tons	Short tons	—Sold or Used— Value f. o. b. plant	Stocks end of month short tons
1956					
October	47,179	149,125	134,014	67,126,363	62,290
November	62,290	145,081	119,787	60,252,640	87,584
December	87,584	148,391	133,186	67,039,743	102,789
Total		1,679,247	1,591,478		
1957					
January	102,496	147,029	104,394	52,418,766	145,131
February	145,131	119,059	97,886	49,173,176	166,324
March	166,324	135,706	141,529	71,240,311	160,501
April	160,501	139,152	123,549	61,932,877	176,104
May	176,104	145,174	126,152	63,352,473	195,126
June	195,126	138,007	140,277	70,379,484	192,856
July	192,856	142,157			

## Aluminum Wrought Products

PRODUCERS' MONTHLY NET SHIPMENTS  
(Bureau of Census — Thousands of Pounds)

	Total	Plate, Sheet, & Strip	Rolled Structural Shapes, Rod, Bar & Wire	Extruded Shapes, Tubes, Blooms & Tubing	Powder, Flake, & Paste
1954 Total	2,088,439	1,165,090	357,229	518,070	46,255
1955					
October	248,806	138,328	30,554	71,456	2,926
November	245,526	137,109	31,656	67,798	2,658
December	242,993	138,592	31,802	64,159	1,837
Total	2,805,500	1,542,368	365,391	812,311	35,854
1956					
January	251,639	142,049	34,008	67,499	2,118
February	240,999	134,077	33,727	65,261	1,901
March	232,767	128,432	30,972	63,482	1,947
April	260,610	143,859	37,971	69,639	3,316
May	264,378	147,613	39,900	68,106	2,215
June	240,415	132,510	33,438	65,600	2,119
July	247,895	139,571	35,346	64,249	2,736
August	248,457	141,400	32,413	66,315	3,039
September	217,425	117,074	32,154	59,462	2,953
October	252,289	136,546	25,385	73,363	2,255
November	218,272	114,618	31,501	64,197	1,716
December	194,822	99,851	31,787	55,225	1,702
Total	2,870,101	1,577,601	398,602	782,398	28,017
1957					
January	234,805	126,008	35,911	64,227	1,970
February	206,397	109,786	30,330	58,296	1,927
March	229,786	120,077	34,365	66,400	2,190
April	238,212	126,755	34,805	68,284	2,572
May	249,012	130,047	35,680	74,364	2,670
June	226,749	117,085	22,427	109,221	2,630

## Aluminum Castings Shipments

(Bureau of Census)

BY TYPE OF CASTING

		(Thousands of Pounds)		Permanent		All	
		Total	Sand	Mold	Die	Other	
1951	Total	515,131	193,378	160,011	151,465	10,277	
1952	Total	518,979	194,616	146,883	169,732	7,748	
1953	Total	658,022	214,553	200,025	239,330	4,114	
1954	Total	609,066	155,738	213,968	232,726	6,800	
1955	Total	833,058	171,757	298,115	354,804	8,282	
1956							
January		74,152	15,861	24,528	33,253	510	
February		73,096	15,560	23,963	32,949	624	
March		73,785	16,597	22,816	33,965	407	
April		67,880	14,732	20,718	31,782	648	
May		65,786	15,600	19,669	29,814	703	
June		58,189	13,448	19,067	25,027	647	
July		52,955	12,398	16,388	23,491	678	
August		61,407	13,100	18,067	29,553	687	
September		62,503	12,354	17,855	31,640	654	
October		74,209	14,389	21,120	37,782	918	
November		69,741	14,333	20,673	33,929	806	
December		67,333	13,391	20,557	32,923	454	
1956 Total		801,036	171,763	245,421	376,108	7,736	
1957							
January		72,999	14,201	20,963	37,194	641	
February		69,451	13,366	21,707	34,311	67	
March		74,527	13,914	22,974	37,521	118	
April		68,284	14,287	20,376	33,493	...	
May		65,108	12,705	20,708	31,602	...	
June		58,547	11,585	17,130	29,700	...	

METALS, SEPTEMBER, 1957

## Virgin Aluminum

Virgin 99% Delivered  
Monthly Average Prices  
(Cents per pound)

	1954	1955	1956	1957
Jan.	21.50	22.90	24.40	27.10
Feb.	21.50	23.20	24.40	27.10
Mar.	21.50	23.20	24.60	27.10
Apr.	21.50	23.20	25.90	27.10
May	21.50	23.20	25.90	27.10
June	21.50	23.20	25.90	27.10
July	21.50	23.20	25.90	27.10
Aug.	22.12	24.26	26.70	28.10
Sept.	22.20	24.40	27.10	...
Oct.	22.20	24.40	27.10	...
Nov.	22.20	24.40	27.10	...
Dec.	22.20	24.40	27.10	...
Av.	21.785	23.655	26.008	...

## Magnesium Wrought Products Shipments

(Bureau of Census)

(Thousands of Pounds)

	1954	1955	1956	1957
Jan.	972	1,776	2,188	1,065
Feb.	1,136	1,648	1,901	1,261
Mar.	1,136	1,947	1,946	1,194
Apr.	892	1,756	2,279	2,511
May	1,129	1,836	2,462	1,715
June	1,312	1,686	2,302	941
July	1,032	1,437	2,002	714
Aug.	1,111	1,742	2,523	...
Sept.	1,183	2,159	1,988	...
Oct.	1,002	1,667	861	...
Nov.	1,243	1,954	2,141	...
Dec.	1,673	1,577	2,452	...
Total	13,743	21,186	24,975	...

## Cadmium Averages

N. Y. Monthly Averages

Cents per lb. in ton lots

	1954	1955	1956	1957
Jan.	200.00	170.00	170.00	170.00
Feb.	170.00	170.00	170.00	170.00
Mar.	170.00	170.00	170.00	170.00
Apr.	170.00	170.00	170.00	170.00
May	170.00	170.00	170.00	170.00
June	170.00	170.00	170.00	170.00
July	170.00	170.00	170.00	170.00
Aug.	170.00	170.00	170.00	170.00
Sept.	170.00	170.00	170.00	...
Oct.	170.00	170.00	170.00	...
Nov.	170.00	170.00	170.00	...
Dec.	170.00	170.00	170.00	...
Av.	172.50	170.00	170.00	...



# Steel Ingot Production

(American Iron and Steel Institute)

Period	Estimated Production — All Companies				Calculated			
	OPEN HEARTH	BESSEMER	ELECTRIC	TOTAL	weekly production, all companies (net tons)	Per cent of capacity	Per cent of capacity	Per cent of capacity
	Net tons of capacity	Net tons of capacity	Net tons of capacity	Net tons of capacity				
1952 Total	82,846,439	87.2	3,523,677	65.6	6,797,923	82.6	93,168,039	85.8
1953 Total	100,473,823	97.9	3,855,705	83.2	7,280,191	71.1	111,609,719	94.9
1954 Total	80,327,494	73.6	3,648,194	63.3	5,436,064	62.0	88,511,652	71.0
1955 Total	105,842,886	95.6	3,319,038	60.3	8,338,592	77.2	117,000,566	93.0
1956								
May	9,370,167	98.2	297,990	73.3	822,219	86.0	10,490,376	96.2
June	8,655,044	93.9	283,846	71.9	773,546	82.6	9,721,436	92.1
July	1,330,151	13.9	...	...	292,012	30.5	1,622,163	14.9
August	7,213,274	75.6	189,564	46.6	719,759	75.3	8,122,697	74.5
September	9,342,796	101.2	286,978	72.9	792,885	85.7	10,422,659	93.8
October	9,841,002	103.2	330,101	81.2	877,410	91.8	11,048,513	101.3
November	9,430,248	102.2	295,827	72.5	829,925	89.6	10,555,500	100.0
December	9,695,919	101.6	308,465	75.9	833,161	87.1	10,837,545	99.4
Total	102,840,585	91.6	3,227,997	67.4	9,147,567	81.2	115,216,149	89.8
1957								
January	9,829,691	99.0	294,839	77.1	884,232	86.5	11,008,762	97.1
February	8,898,671	99.2	277,682	80.4	810,853	87.8	9,987,206	97.6
March	9,442,164	95.1	275,156	71.0	871,754	85.2	10,589,074	93.4
April	8,820,328	91.8	231,731	62.6	762,721	77.1	9,814,780	89.5
May	8,842,707	89.1	201,864	52.8	747,752	73.1	9,792,323	86.4
June	8,498,903	88.4	210,915	57.0	681,584	68.9	9,391,402	85.6
July	8,086,519	81.4	194,638	50.9	627,575	61.4	8,908,732	78.6
August	8,289,000	83.3	205,000	53.6	744,000	70.8	9,218,000	81.3

# Steel Ingot Operations

(Percentage of Capacity as Reported by American Iron & Steel Institute)

Week	Beginning	1954	1955	1956	1957
Jan. 7...	75.4	81.2	97.6	98.4	
Jan. 14...	74.3	83.2	98.6	96.4	
Jan. 21...	74.1	83.2	99.0	96.6	
Jan. 28...	75.6	85.0	100.4	97.6	
Feb. 4...	74.4	85.4	99.3	97.1	
Feb. 11...	74.4	86.8	99.1	97.7	
Feb. 18...	74.6	89.1	98.8	97.8	
Feb. 25...	73.6	90.8	98.8	96.0	
Mar. 4...	70.7	91.9	99.9	94.2	
Mar. 11...	69.3	92.9	100.0	93.8	
Mar. 18...	67.6	94.2	100.6	93.5	
Mar. 25...	68.1	93.7	99.5	92.4	
Apr. 1...	69.1	94.4	99.6	90.6	
Apr. 8...	68.0	95.3	97.7	90.3	
Apr. 15...	68.0	94.6	100.9	90.4	
Apr. 22...	68.6	94.6	100.2	88.7	
Apr. 29...	68.7	95.6	100.5	87.0	
May 6...	69.4	96.6	96.4	86.7	
May 13...	70.9	97.2	95.2	84.2	
May 20...	71.8	96.9	95.3	86.4	
May 27...	71.2	96.4	97.3	88.0	
June 3...	70.2	95.8	96.3	87.5	
June 10...	73.2	94.7	96.7	86.5	
June 17...	72.3	96.0	93.4	85.2	
June 24...	72.1	95.0	93.0	84.0	
July 1...	65.8	71.1	84.9	78.5	
July 8...	60.0	85.9	12.3	78.7	
July 15...	64.3	91.2	12.9	79.3	
July 22...	65.3	91.0	14.6	79.4	
July 29...	64.2	90.7	17.0	79.4	
Aug. 5...	64.0	86.9	16.9	79.8	
Aug. 12...	64.0	89.4	57.5	80.6	
Aug. 19...	61.8	90.2	87.5	82.1	
Aug. 26...	63.5	90.6	95.8	82.2	
Sept. 2...	64.0	93.4	97.0	81.0	
Sept. 9...	63.0	93.8	98.7	81.9	
Sept. 16...	66.3	95.7	100.6	...	
Sept. 23...	68.7	96.1	100.6	...	
Sept. 30...	70.4	97.0	101.6	...	
Oct. 7...	71.0	96.7	101.8	...	
Oct. 14...	72.8	96.5	100.9	...	
Oct. 21...	73.6	98.9	101.4	...	
Oct. 28...	74.5	100.0	101.2	...	
Nov. 4...	76.4	99.4	101.3	...	
Nov. 11...	77.2	99.6	100.6	...	
Nov. 18...	79.3	99.2	100.2	...	
Nov. 25...	80.3	100.1	100.1	...	
Dec. 2...	81.4	97.6	101.1	...	
Dec. 9...	82.5	100.1	101.3	...	
Dec. 16...	81.5	100.3	102.0	...	
Dec. 23...	72.4	96.9	94.3	...	
Dec. 30...	77.6	95.7	97.3	...	

## Blast Furnace Output

(American Iron and Steel Institute)

Period	Pig Iron	net tons Ferro-manganese & Spiegel	Total Capacity	%
1947				
Ttl. Yr.	58,507,169	702,561	59,209,730	98.1
1948				
Ttl. Yr.	60,135,941	712,899	60,848,840	90.3
1949				
Ttl. Yr.	53,613,779	592,564	54,206,343	76.9
1950				
Ttl. Yr.	64,810,272	678,896	65,489,168	91.5
1951				
Ttl. Yr.	70,487,880	745,381	71,233,261	98.8
1952				
Ttl. Yr.	81,838,668	629,926	82,468,594	84.2
1953				
Total	74,987,721	855,038	75,842,759	95.5
1954				
Total	68,119,952	648,738	68,768,690	71.6
1955				
Apr.	6,389,937	64,712	6,454,649	92.4
May	6,785,236	61,899	6,847,135	96.4
June	6,495,030	48,785	6,543,815	94.7
July	6,389,898	61,166	6,451,064	96.5
Aug.	6,859,589	71,802	6,931,391	93.5
Sept.	6,858,878	49,788	6,908,666	97.3
Oct.	6,905,330	59,993	6,965,323	97.6
Nov.	6,638,649	62,841	6,701,490	97.0
Dec.	6,887,607	65,849	6,953,456	97.7
Total	77,114,078	868,758	77,982,836	92.7
1956				
Jan.	6,985,945	63,619	7,049,564	97.1
Feb.	6,839,199	63,618	6,902,817	97.2
Mar.	7,085,877	65,566	7,151,443	98.8
Apr.	6,869,533	62,760	6,932,293	96.9
May	6,878,103	47,840	6,925,943	95.3
June	6,887,608	46,981	6,934,589	91.6
July	1,089,518	17,491	1,107,009	15.2
Aug.	5,100,669	41,648	5,142,317	70.8
Sept.	6,878,064	59,584	6,937,648	98.7
Oct.	7,245,650	69,909	7,315,559	100.8
Nov.	6,977,457	58,614	7,036,071	100.1
Dec.	7,268,743	65,841	7,334,584	101.0
Total	75,301,134	664,341	75,965,475	89.9
1957				
Jan.	7,209,547	72,826	7,282,373	98.8
Feb.	6,586,133	61,973	6,648,106	100.0
Mar.	7,179,100	67,779	7,246,879	98.3
Apr.	6,810,102	60,784	6,870,886	96.3
May	6,879,881	65,566	6,945,447	94.2
June	6,593,326	66,266	6,659,592	90.3
July	6,625,901	66,031	6,691,932	90.8

## Steel Castings Shipments

(Bureau of Census)

Period	Total	For Sale	For Own Use
1950	1,461,667	929,192	374,217
1951	2,101,604	1,507,413	594,191
1952	1,925,116	1,476,352	448,767
1953	1,829,277	1,290,016	431,330
1954			
Total	1,184,096	880,158	303,938
1955			
Mar.	127,460	98,926	28,534
Apr.	120,053	92,237	27,816
May	122,465	92,713	29,752
June	133,887	102,457	31,430
July	97,875	71,170	26,705
Aug.	126,406	96,290	30,116
Sept.	140,843	107,622	33,221
Oct.	145,674	110,409	35,265
Nov.	152,381	116,908	35,473
Dec.	158,982	122,201	36,781
Total	1,530,694	1,166,706	363,988
1956			
Jan.	158,618	123,343	35,275
Feb.	165,398	128,698	36,800
Mar.	170,045	130,839	39,206
Apr.	163,708	125,015	38,693
May	178,227	142,025	36,202
June	164,661	129,147	35,514
July	117,984	96,350	21,634
Aug.	159,831	127,001	32,830
Sept.	155,046	121,705	33,341
Oct.	175,630	135,798	39,832
Nov.	164,114	126,900	37,214
Dec.	158,725	125,569	33,156
Total	1,931,987	1,512,290	419,697
1957			
Jan.	169,240	133,826	35,414
Feb.	154,932	121,667	33,265
Mar.	160,054	124,416	35,638
Apr.	162,498	124,549	37,949
May	164,575	125,431	39,144

## Galvanized Sheet Shipments

(American Iron & Steel Institute)

Period	1954	1955	1956	1957
Jan.	169,086	211,101	269,464	235,902
Feb.	167,433	199,408	272,997	205,048
Mar.	180,198	238,649	291,193	206,836
Apr.	203,312	239,001	266,728	198,835
May	201,671	235,962	272,741	206,657
June	200,456	246,940	279,058	239,037
July	214,349	205,211	*	167,247
Aug.	207,113	241,863	276,048	
Sept.	209,765	269,020	256,803	
Oct.	209,498	260,010	278,637	
Nov.	195,190	255,692	255,135	
Dec.	205,561	261,640	239,173	

Tot. 2,362,632 2,864,497 2,957,991

\* Combined with August figures.

## SHIPMENTS OF TIN-TERNEPLATE

(American Iron & Steel Institute)

Period	Hot Dipped	Electrolytic
1956		
Jan.	81,034	88,174
Feb.	77,877	63,040
Mar.	133,257	113,593
Apr.	138,556	130,037
May	70,282	34,292
June	84,371	32,783
July	*	39,234
Aug.	81,005	408,903
Sept.	72,400	396,588
Oct.	92,394	415,451
Nov.	70,510	325,408
Dec.	68,385	288,896

Tot. 950,070 4,615,068

\* Combined with August figures.

METALS, SEPTEMBER, 1957

# INTERNATIONAL MINERALS and METALS CORPORATION

11 BROADWAY, NEW YORK 4, N. Y.

## COPPER

## ZINC

*Buyers*

ORES

CONCENTRATES

SCRAP

RESIDUES

For: **PHELPS DODGE PLANTS IN**

Laurel Hill, L. I., N. Y.

Douglas, Arizona

El Paso, Texas

For: **NATIONAL ZINC CO.**

(Subsidiary)

Bartlesville, Oklahoma

*Sellers*

COPPER (Electrolytic)

ZINC (All Grades)

CADMIUM

MERCURY

## We'll get out of it what we put in!

### Get Your Scrap Metal Out

#### CONSUMERS OF

NICKEL — COPPER — BEARING MATERIAL

NICKEL PLATERS — RACKS AND BASKETS

CLEAN AND OFF-GRADES OF MONEL METAL

---

## I. Schumann & Company

4391 Bradley Road

P. O. Box 2219 — SHadyside 1-7800

Cleveland 9, Ohio

# SPECIAL HIGH GRADE zinc

**ANACONDA 99.99+% ELECTRIC<sup>®</sup>**

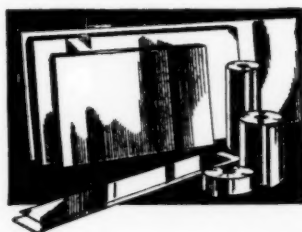


A consistent favorite with the trade for zinc-base die casting alloys. Year in and year out many leading die casters use Anaconda Electric Zinc. Always available from

**Anaconda Sales Company**

25 Broadway, New York 4, N. Y.

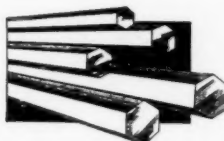
54312



## **ANACONDA** COPPER · BRASS · BRONZE sheet,

Strip, Rod, Wire, Copper Tubes and Fittings, 85 Red Brass Pipe, Free-Cutting Rods

made by THE AMERICAN BRASS COMPANY, Waterbury 20, Conn. • Subsidiary of The Anaconda Company



### DISTRICT SALES OFFICES

Ansonia, Conn.  
Atlanta 3, Ga.  
Buffalo 5, N. Y.  
Cambridge 42, Mass.  
Cedar Rapids, Iowa  
Charlotte 2, N. C.  
Chicago 39, Ill.  
Cincinnati 2, Ohio  
Cleveland 14, Ohio  
Columbus 15, Ohio  
Dallas 25, Texas  
Denver 2, Colo.  
Detroit 31, Mich.  
Houston 2, Texas  
Kenosha, Wis.  
Los Angeles 17, Calif.  
Miami 30, Fla.  
Milwaukee 4, Wis.  
Minneapolis 2, Minn.  
Newark 2, N. J.  
New York 16, N. Y.  
Philadelphia 22, Pa.  
Pittsburgh 19, Pa.  
Providence 3, R. I.  
Rochester 4, N. Y.  
St. Louis 3, Mo.  
San Francisco 4, Calif.  
Seattle 1, Wash.  
Syracuse 2, N. Y.  
Torrington, Conn.  
Washington 5, D. C.  
Waterbury 20, Conn.  
General Offices:  
Waterbury 20, Conn.  
In Canada: Anaconda American  
Brass Limited General Offices:  
New Toronto, Ontario  
Montreal Office:  
909 Dominion Square Building  
Warehouses